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WILD FLOWERS OF THE CAPE

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DISA UNIFLORA

Wild Flowers of The Cape

A FLORAL YEAR

BY

A. HANDEL HAMER

Commissioner of "The Wild Flower Protection Association."

WITH TWELVE REPRODUCTIONS IN ACTUAL COLOUR

By ETHEL DRISCOLL,

AND 79 DRAWINGS IN BLACK AND WHITE

By DOROTHY LEVYNS



MASKEW MILLER, LIMITED
CAPE TOWN

TO
W. R. Ball, Esq.
Chairman of Wild Flower Protection Association.

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leather and fancy bindings.

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PUBLISHERS' NOTE.

The almost daily demand from visiting laymen, and the man in the street, for a popular book on our beautiful Flora, based on a simple plan, has prompted the preparation of this volume, written in popular language, not overburdened with scientific detail and phraseology.

Every flower dealt with in the text is reproduced by black and white drawings, while the key list of flowers, appendices, etc., should be of considerable value to the amateur botanist and collector.

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LIST OF COLOURED PLATES

By ETHEL DRISCOLL

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28. *Disa lacera* (P.) (*Herschelia venusta*) (p. 28 and Pl. X).
29. *Disperis capensis* (p. 6).
30. *Erica cerinthoides* (p. 22 and Pl. II.)
31. *Erica halicacaba* (p. 30).
32. *Erica urna-viridis* (p. 20).
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38. *Gladiolus brevifolius* (p. 75).

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42. *Gladiolus inflatus* (p. 37).
43. *Gladiolus maculatus* (P.) (p. 82).
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45. *Gladiolus recurvus* (P.) (p. 13).
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- Zantedeschia* : See No. 12.

JULY

PRINCIPAL FLOWERS IN BLOOM.

- * Anemone. (2)
- * Moeder Kappitjes. (29)
- * Pink Sweet Pea Bush. (66)
- * Baviantjes. (15)
- * White Arum. (12)
- Flames. (7)
- Small Brown Afrikanders. (47)
- Wax Runner. (59)

[An asterisk indicates that the flower is mentioned in this month's text, while the numbers in brackets indicate position on Key List of Flowers. For the list of flowers protected from picking see the chapter on the protection of wild flowers.]

WILD FLOWERS OF THE CAPE

JULY

Spring is not clearly defined in the Cape Peninsula, where there are flowers all the year round, and where some birds—*e.g.*, Sugar Birds—breed in the winter months. One botanical authority dates our spring from the time when the annuals begin to grow.

Annuals are plants which exist for a part of the year (in our case the dry season) in the form of seed only. When the rains come on, they quickly build new plants, which again must flower and produce seed before the dry season returns. This would place our spring in what is popularly called our winter (and is, of course, our winter according to the sun).

There is, however, a season now commencing which answers to the general idea of spring, when the flowers crowd upon us and the greater number of the birds build their nests. This month, in fact, brings us our mass effects. First one finds that spring has thrown down a silken scarf of *Mesembrianthemum*, or a sprinkling of *Oxalis*, white or pink; then primrose yellows appear in places by the roadside, and an occasional arum gleams white amidst the dark green of the moist places.

A little later, and the scarves have grown into



sheets and the patches become fields of colour. Snow appears to cover the Lion's Back, and the Common is a brilliant mass of yellow. Fields in the suburbs are populated with arums, and the western slopes of the Mountain are gorgeous with a yellow-flowered bush tall enough to respond to the breeze like a field of corn.

The "snow" on Signal Hill is a composite flower—i.e., one belonging to the Daisy family; it is called *Dimorphotheca pluvialis*. The yellow on Green Point Common is chiefly due to the little *Galaxia*, one of the *Iridaceae*. The fine yellow bush on the western slopes is a composite (*Euryops abrotanifolius*), and one of the conspicuous mass effects which follow will be that of the lovely blue aster, a flower which flourishes exceedingly on Signal Hill and at Llandudno.

The lover of nature, regarding these effects, will notice that though plants compete for light and air there is never any appearance of ugly crowding or crushing among the blooms. Each plant produces its flowers when it has attained an assured position, and the position of the blooms keeps them free from interference by neighbours. Where each plant produces numerous flowers, they are always set out to the best advantage. The flowering stems are produced free from each other or at slightly divergent angles, and if there is a head of flowers on a stalk the pedicels are divergently arranged so as to give each flower the best chance of self-realization for the benefit of the species. To put it in another way, it will be seen that both in an unspoiled mass effect and on an individual plant each flower has its plane and place, and the result is a harmony which, when one has once learned to appreciate it, it is painful to see destroyed.



During this month *Podalyria calyptrata* (the pink sweet pea bush) begins to brighten the kloofs like the flush of dawn.

One of our most beautiful flowers, *Anemone capensis*, is now in full bloom. It is found at the higher altitudes, and favours a cool situation; and one often comes upon the flower suddenly among rocks when its delicate beauty seems to solidify out of the atmosphere as one gazes.

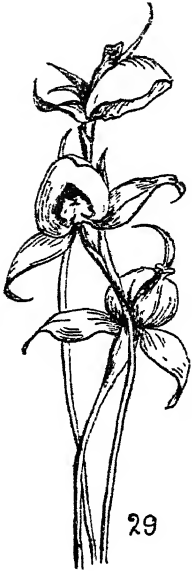
The top of Nursery Ravine on Table Mountain (part of the Kirstenbosch Nature Reserve), is an excellent place in which to see these flowers; also the eastern aspect of the Saddle, the western side of the Mountain from the top of Slangolie to Groote Kop, and suitable aspects of the Muizenberg and Kalk Bay range.

The *Anemone* belongs to the *Ranunculaceae*. A member of this family which brings back memories to many people is the familiar English buttercup.

On both western and eastern slopes, and without going up very far, a pretty and quaint little orchid may now be found, *Disperis capensis* (Moeder Kap-pitjes—mother caps, or sun-bonnets). It produces one flower on a stem six to nine inches high. The object of a flower is, of course, to attract by colour or scent, and to entice by sweets waiting within, insects or birds which in return act as parcel post for the pollen. In diving for the sweets they get the pollen dusted on to some part of the head or back, and in the next flower they visit this will be received on the stigma, thus ensuring that in the resulting seed a new individual shall be produced from the union of two others.

In the orchids the pollen is packed into two little club-shaped masses which attach themselves to the





visitor. The remarkable arrangements by which plants ensure the right distribution and reception of the pollen can be studied in a textbook of elementary botany, or in Darwin's *Fertilisation of Orchids*—a fascinating book.

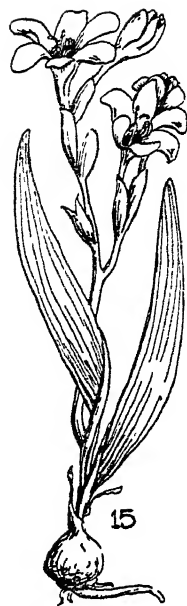
Now, in pursuance of this object a flower must catch the eye of one of the desired visitors as soon as possible after it has attained maturity, and in this connection there are two important matters besides colour and scent to be considered—*viz.*, orientation and lighting. Take our Moeder Kappitjes; it will be found that with few exceptions they are all so orientated as to get a clear view in the open or down-slope direction, and this whether on the western or on the eastern side of the Mountain. As to lighting, the proper way to see what this means in a hooded flower such as this is to take the opportunity when the sun is above the slope on which it grows. It is the through lighting which displays the beauty of such flowers, and it is useless to look down upon a little hooded flower six inches above the ground from a height of five or six feet; you must get down to it.



When the sun is duly behind the flower, lie on the veld and look in. You will probably do better to close an eye. You will find that the sides of the hood are semi-transparent rose-colour and that at the back are two slits almost entirely transparent, then two slits of very deep rose. Concentrate on it, and forget your physical size. You will be able to imagine yourself in a church gazing at an east window. Such are the attractions provided to act on the nervous systems of insects and birds, and for myself I do not doubt that when I enter an empty church and walk towards an east window my

feelings are related to those of an insect entering a flower.

Baviantjes (*Babiana* spp.—*Iridaceae*), often popularly called “crocuses” and always hailed as a sign of spring, attain great profusion during this month. Their open flowers look straight up at the sky from whence they might have taken their colour. There are no better places to see them than the walks round Signal Hill and the lower slopes of Lion’s Head. They are also splendid on the Silvermine plateau above Muizenberg.





ERICA CERINTHOIDES

*

AUGUST

PRINCIPAL FLOWERS IN BLOOM.

Orange Nodding Head. (57)

Anemone. (2)

* Pink Sweet Pea Bush. (66)

* Wax Runner. (59)

* Flames. (7)

* Small Brown Afrikander. (47)

* Mauve Afrikander. (45)

Kalkoentjies. (36)

White Arums. (12)

*

WILD FLOWERS OF THE CAPE

AUGUST

Let us return for a moment to the orientation and lighting of flowers, as we shall find the point a most interesting one in our field observations. Many flowers have what may be called a "general orientation, as, for example, some of the flowers of the daisy type, and mesembrianthemums, which open flat under the sun, or the iris type among the *Iridaceae*, which look upwards towards the sky. Flowers of this type present landing-places for their visitors at all points of the compass. This handsome orange daisy (*Arctotis*) with iridescent ring round the centre of florets, simply cries: "Land at any of the piers, and you'll find refreshments at the central buffet." Other flowers, however, have a particular orientation. They may be diagrammatically represented by a tobacco pipe held so that the stem of the pipe represents the upright stem of the flower.



Species among the gladioli, watsonias, antholyzas and orchids will at once occur to the reader. These flowers do not offer a welcome to all comers, but on the contrary are very exclusive. The nectar

will be at the bottom of a tube, sometimes a very long tube indeed, so that only an insect which has developed an abnormally long tongue for the purpose can reach it. Each of these favoured visitors, therefore, may be supposed to confine himself to the flower where he is thus protected from competition.

In this way the pollen will be more certain to be carried from one individual of the same species to another without waste or loss of time.

Well, we do not spread our table in view of all comers, but behind a porch made to suit the expected guest. Which way shall we set the porch so as most surely to catch his eye? How will our incense be most surely diffused in the air of a still evening? How shall we best light up our colouring?

The problems are met in various ways, but a very general reply to the first and second will be: "By orientating to get the longest possible down-slope view. And to the third question a number will give the interesting answer: "We vote for a through lighting."

We shall try to observe these points as we continue our observations in the field, and this month gives us an example of a flower (*Gladiolus tenellus*, the small brown afrikander) which has adopted most thoroughly the through-lighting plan. It seems, indeed, to have almost dispensed with the aid of colour. It is like a brown afrikander in which the colouring is reduced almost to a watery green, the reddish-brown being left only in the veinings, where it forms a linear and dotted shading. Viewed from the standpoint of an erect human being, the flowers are dull and inconspicuous; but they are remarkable for their transparency, and this is



particularly noticeable in the lower portion of the broad petal which forms the roof of the flower.

Through this roof the sunlight shines and creates a glowing interior, which, no doubt, is quite as efficient in attracting or guiding insect visitors as the most brilliant colour.

Stoop down and look into this apparently inconspicuous flower when the sun is behind it; you will find yourself gazing into a miniature scene as brilliant as the cleverest stage artist puts on with his lights and transparencies in a transformation scene.

Adapt your sense of magnitude, and you are in a brilliant and cunningly devised temple of the sun.

Among the best places for seeing this flower are the lower western slopes of Lion's Head and the walks of the Municipal Nature Reserve on that mountain.

On these slopes also may be seen this month the kalkoentjes (*Gladiolus alatus*) with their bold red terra-cotta and yellow-green scheme of colouring, and the wax runner (*Microlooma tenuifolium*), a particular gem to be found on the south and south-west aspects. Its decorative effect is, indeed, distinctly akin to that of jewellery as it displays its clusters of bright pink coral-like urns by twining round some dead branch burnt in a past fire.

The mauve afrikander (*Gladiolus recurvus*) is in evidence this month. It grows on the Flats, and on the flats of Chapman's Bay, but is also to be found on the lower slopes of the mountains at Muizenberg and elsewhere. It is a great favourite with the country people on account of its scent, and it appears to be the correct thing for those on whose farms it grows to bring a bunch as a gift to friends in town.





There is something peculiarly thrilling about a mass effect in blue such as we now get from the wild *Aster* (*fruticosus*) or the *Wistaria*. The colour, of course, is not a solid bank, but is modified by being presented by thousands of little shaded units, set in various planes and with shadows beneath. The colour floats in the sunshine over the shadows of the massed bushes, and seems to invite to a sort of psychic bathing. The *Aster* grows in fine masses on the slopes beneath the Victoria Road near Llandudno.

A splendid place to see *Antholyza merianella* (Flames) this month is on the Muizenberg Mountain up to 1600 feet, at which altitude they bloom late. Where there are hundreds to be seen, they are a truly glorious sight. The aspect is south and east. They produce three or four flowers on a stem, and orientate variously.

Podalyria calyptrata (pink sweet pea bush) perhaps attains its greatest beauty this month. Growing to a height of ten or fifteen feet, and veiled in its flowers, its mass effect in suitable places forms a glorious rosy-pink flush filling a ravine or covering a slope. In such a situation one bathes in the cloud of colour, and a delicate scent perfumes the bath.

Starting from Kloof Nek, it may easily be seen in the ravines which cross either the Contour Road or the Pipe Track. The wild part of Kirstenbosch is a good place, and in some years (when it has been fortunately protected from fires) Farmer Peck's Valley at Muizenberg has a splendid show of this beautiful shrub.

But, while mass effects are its greatest glory, as, perhaps, of almost any flower, a single specimen may gain greatly by position, and nothing is more

beautiful than a single tree of *Podalyria calypttrata* overhanging a rocky stream, as it often does.

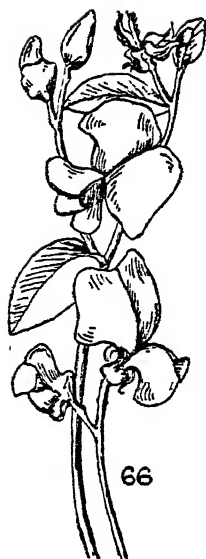
Other examples of single flowers having a poignant appeal from position are a drip disa on a mossy slab or a blue disa by the side of a footpath.

The melodramatic strain in man's character seems to love the idea of struggle and gory fighting in nature. As a matter of fact, there is little gory fighting. The vast amount of co-operation there is in nature is not dwelt upon as it ought to be; but it is there for anybody to observe, and, like many other things, is excellently exemplified in the world of plants.

Any flower of the daisy family (*Compositae*), for instance, is a perfect little co-operative society in itself. What the uninitiated call a "flower" is really a number of flowers which, to economize energy and material, divide out the work of presenting an attractive appearance, and benefit by the resulting visitors as a whole, the object of the flowers being of course to attract insects or birds by means of which the pollen of one flower is carried to the stigma of another, thus fertilizing the ova.

Well, here are a hundred little flowers all taking their stand together on a round platform, and, instead of each spending money on dress material, as it were, that is deputed to the outer row, who produce the rays of the daisy; and, of course, they only need to dress up on one side each.

Other details of the ways in which the little crowd co-operates, and its orderly methods, are open to be discovered by anyone wishing to pursue the subject.





(1) *GLADIOLUS GRANDIS* (*Large Brown Africander*)
(2) *GLADIOLUS BLANDUS* (*Painted Lady*).

*

SEPTEMBER

PRINCIPAL FLOWERS IN BLOOM.

- * Anemone. (2)
 - Orange Nodding Head. (57)
 - Pink Sweet Pea Bush. (66)
- * Wax Runner. (59)
- * Large Brown Afrikander. (41)
- * Small Brown Afrikander. (47)
- * Painted Lady. (37)
- * Kalkoentjies. (36)
- * Chinkerinchees. (19)
 - White Arum. (12)
 - Erica cerinthoides (30)

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WILD FLOWERS OF THE CAPE

SEPTEMBER

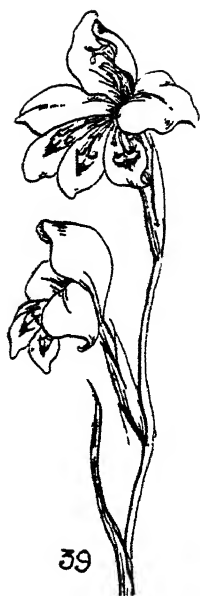
This is the month when the painted ladies begin to be in force. They belong to the *Gladiolus* group (family, *Iridaceae*), and there are at least seven species included under this popular designation.

They vary in colour from a very pure white (*G. debilis*) to white strongly flushed with pink (*G. Pappei**) or salmon-pink (*G. tabularis**), but they are all alike in having a red "spade-mark" on each of the three lower petals. These are supposed to guide the visitors to the tube, where the sweets are waiting for those adapted to get them.

Early places in which to see painted ladies are the Saddle and the front of the Mountain above the Contour Road: these are *G. blandus*. This species may bear seven or more flowers on a spike, but four fresh flowers at once seems the usual limit. These flowers with their solid colour (white, perhaps slightly flushed with pink), and the spade-marks to attract and guide their visitors, as might be supposed, do not go in for a through lighting effect



* In the case of these two species the nomenclature of the schedules of protected flowers issued by the Provincial Authorities is followed, though it differs from some authorities.

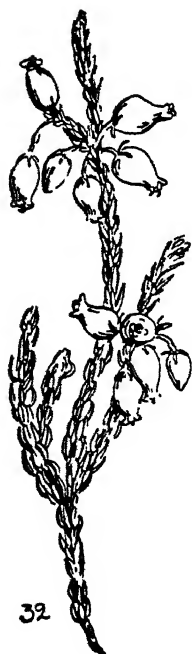


like the brown afrikanders, but shine by reflected light, and are usually found facing north to east.

In *G. blandus* the spike bends forward down slope, and the flowers lift up their faces; they are so arranged as not to interfere with each other's view.

G. debilis grows on a taller and finer stem, and the flower is smaller, shallower and rounder. There is no better place for this species than the Silvermine Plateau.

This is the time of the year when one wants to be in two places at once, like the celebrated bird; but no one place could have beaten the Silvermine Plateau on a recent day at the end of September. The day was quiet and the sunlight drenching. A booted eagle, floating in circles above, showed his twin crescents as the light shone through his wings. Painted ladies (*G. debilis*) were fairly numerous, and a robin flitting from under a rock betrayed a nest with three haze-blue eggs.



Here the composites were holding revel, and some of these daisies were four inches in diameter. White golden and orange shades were the dress colours they affected. Malachite sunbirds were about, and a rock-thrush with his blue-grey head and tawny breast sat singing quietly on a small boulder, seeming to feel a comradeship with us in the hot sunshine.

An easy way to attain this Plateau is by Farmer Peck's Valley from Muizenberg. This is the shallow depression seen from the railway line or from the main road, lying behind the Park Hotel. Once over the top space, solitude is there for those who love it.

Gladiolus grandis (the large brown afrikander)

blooms this month, and is to be seen at the beautiful Constantia corner of the Mountain.

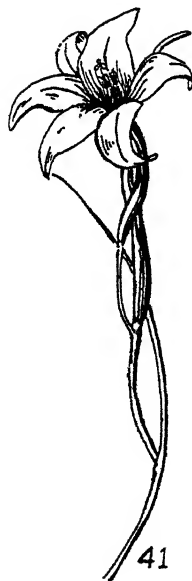
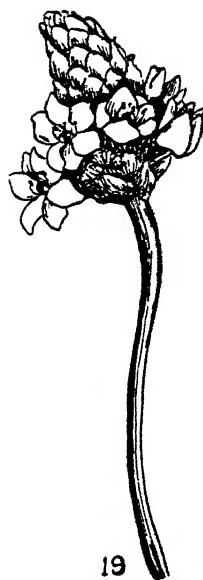
This fine flower, two-and-a-half inches across, is borne in ones, twos, or threes on stems fifteen to twenty-seven inches high. It is coloured by many veinings of ruddy brown. It is an *avondbloem*, the scent coming in the evenings, and is usually orientated facing east, so that the evening light shines through the transparencies at the back of the hood, and shows the way to the soft-feathered moth which has been attracted by the scent.

When "the Saddle" (with a capital S) is mentioned, it is the saddle between Table Mountain and Devil's Peak that is meant. Though to attain the top is more strenuous than an ordinary walk, it is not beyond the capacity of anyone who is pretty fit, and, besides exercise being its own reward, fine views and beautiful flowers will be seen.

It can be attacked from the eastern side *via* Newlands, or from the western from the Contour Road on the face of the Mountain. On this route advantage might be taken of the zigzags made by the Forest Department. From the suburbs the Contour Road can be reached *via* Groote Schuur.

The Saddle is at its best in September, and is well worth being made the objective of an outing. On the eastern side, after the oak trees have been won through, the native bush will be found very luxuriant (there is a track through it), *Protea cynaroides*, for instance, growing as high as fifteen feet. In spite of the thick undergrowth, anemones are frequent, and grow tall enough to present their lovely flowers to the sun free from interference.

The mountain sunbird, the one with the bronze breast, has his family on the wing, and makes a





good deal of fuss as he flits from one point of vantage to another.

On the top there is sweet open veld with pink heath in masses, *Gnidia*, well grown proteas, and effects in old ivory caused by the bracts of *Leucadendron*.

The Lion's Head Reserve is approached from the tramway road above Bantry Bay, or from the Kloof Road above the Round House, or from Kloof Nek, taking the road on the eastern aspect of the Lion's Head and turning to the left when the sign-post is reached, or carrying on until the shoulder is reached and then turning to the left.

On the Lion's Head Reserve one must not look for solitude, but its floral beauties are at the present moment unsurpassed and encourage the hope that beauty and accessibility to man may yet be reconciled.

Lachenalias and baviantjies are everywhere. Decorative composites are numerous, including the blue aster (*fruticosus*). The small brown afrikander (*Gladiolus tenellus*) is still lingering there, and kalkoen-tjies (*G. alatus*) are numerous. This flower, like *Gladiolus tenellus*, adopts a through lighting, and one has not seen the flower properly until with the sun above the slope on which it grows (it orientates down slope) one has stooped down and peered into the flower as the sun shines through.

The little pink-coral urns of wax runner (*Microlooma tenuifolium*) are to be seen on the south or south-west aspects. It is pleasing to find a good number of chinkerinchees, for, if protection is not extended to this flower in its wild state, it should still certainly have sanctuaries. The pink *Watsonia* (*rosea*) which is a feature of these slopes is rapidly coming on.

The great leguminous family of plants (*Leguminosae*) is endowed with an endless succession of



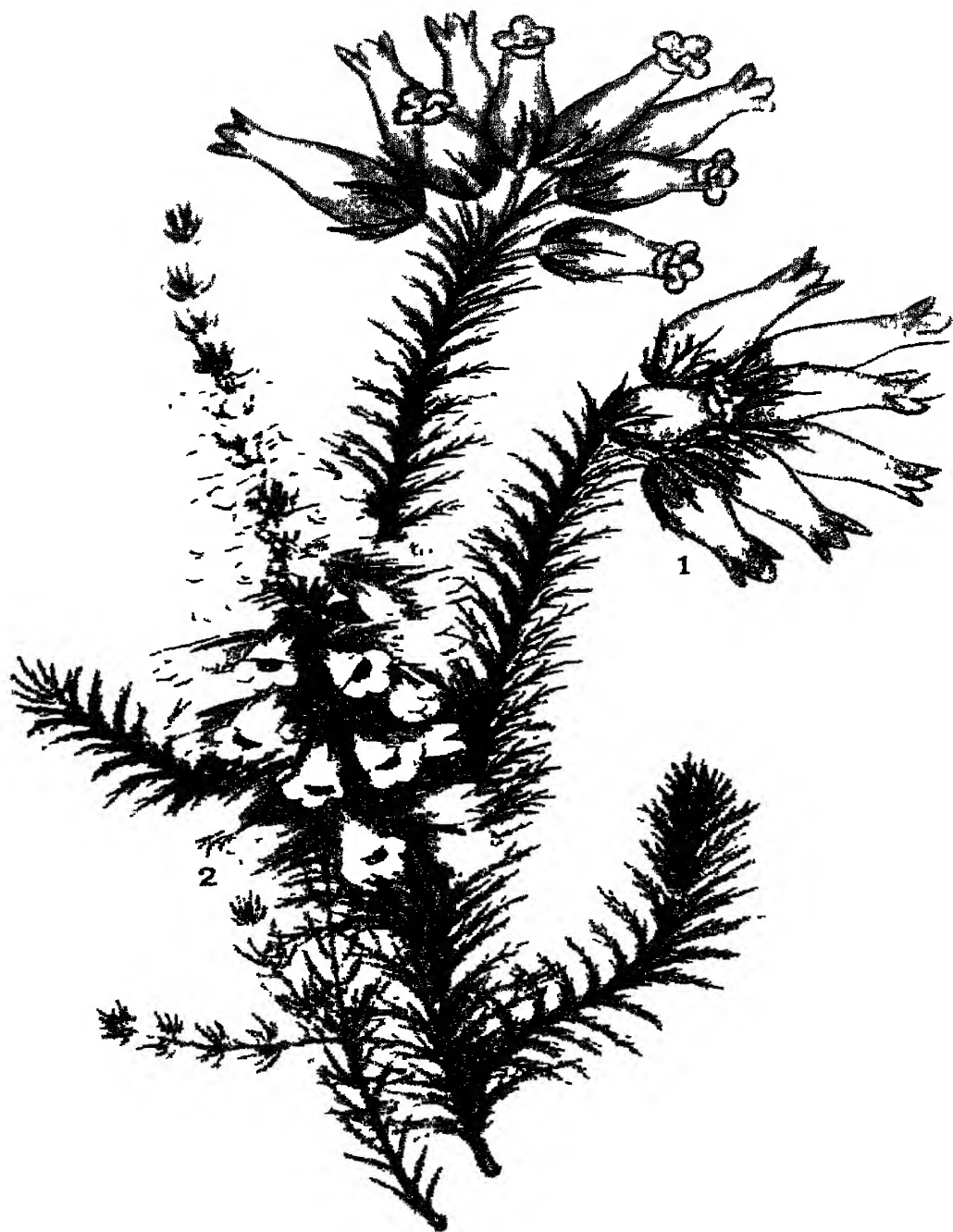
graceful species, and succeeding the bolder *calyptrata* a blue fairy of the tribe (*Psoralea*) appears this month more shyly in the kloofs and about running water.

Lovers of flowers will naturally also be lovers and observers of bird life, and on our tramps in the spring we often come across delightful and interesting finds. Birds' nests placed on or near the ground, for instance, are very difficult to find by searching. Acres of heath-covered mountain slope which may contain a few such nests give no indication whatever as to where one should be sought. The protectively coloured female sits tight; but occasionally one steps by accident so close to such a nest that the strain on the watching bird becomes intolerable and there is, as it were, a little explosion at one's feet. We have thus discovered a Cape grass bird's nest when looking for the large brown afrikander on the slopes of Constantia Corner, but, even so, not without minute search about the spot indicated.

What fascination there is about the find! Suddenly the eye becomes aware of a little bit of perfect order among the haphazard stuff which accumulates near the ground—a little cup containing the magic formula for the renewal of warm-blooded life according to an embodiment perfected through the ages. This cup was very deep, being about two-and-a-half inches in diameter and two-and-a-half inches in depth; the lining was of very fine bents and beautiful in its regularity, and at the bottom lay two dusky eggs. The bird did not fly very far, and returned to within a few yards, so that her handsome plumage could be seen in detail; a rich chestnut head and tail, and flecked or spotted breast—handsome in the light, but very protective on the nest, for the



chestnut was the colour of many items in the dry portion of the vegetation, while the peculiar pointed shape of the tail looked like a dry and sheathy bit of the same.



(1) ERICA PRINCEPS
(2) ERICA LINNAEA.

*

OCTOBER

PRINCIPAL FLOWERS IN BLOOM.

- * Blue Disa of the Flats. (22)
- * Orange Nodding Head. (57)
- * Painted Ladies. (37)
 - Watsonia. (77)
 - Giant Protea. (67)
 - Wax Runner. (59)
- * Anemone. (2)
- * Pelargoniums. (65)
- * Erica halicacaba. (31)
 - White Arum. (12)

*

WILD FLOWERS OF THE CAPE

OCTOBER

In October the pelargoniums begin to be a distinctive feature of the drier slopes and lower altitudes, such as the western slopes of the Lion's Head, or about Kasteel Poort, and on the eastern side, above Kirstenbosch south of Nursery Ravine, on the Muizenberg range, and in the drier parts of the Silvermine Plateau.

On the slope above Kirstenbosch the lordly pelargonium always seems to give an air of hothouse distinction to the lower slopes, where its trusses of purple-pink flowers are massed in the sun, usually among an outcrop of decorative rocks.

Above is to be seen a revel of composites: everlasting more beautiful because the centre of golden-yellow florets is fresh; single white or mauve daisies and tall slender branching plants of the family in masses, lifting themselves above the bush so that their yellow or reddish flowers can respond to the movements of the sunlit atmospheric ocean.

The eagle of Crown Rock launches himself into space and planes easily above in circles of investigation.

On the top anemones still linger. Descending by another part of the eastern slope in the early afternoon, orange nodding head may be found in



bud, and some handsome bird of prey, suddenly disturbed, may startle the disturber with an angry snoring hiss, flapping quickly into cover and not soaring. Probably an owl has disturbed it in its slumbers.

People are so fond of the idea of ruthless competition in nature that perhaps we may be excused for drawing attention again to the co-operative side of natural life, particularly in view of the beautifully illustrative masses of composites we have this month on the Mountain slopes.

It is true, of course, that intentional co-operation, if we may call it so, is confined within the tribe, pack, or family, and that competition asserts itself again outside those limits between one tribe or family and another; but, even so, territorialism, and the general acceptance of the situation once territory is settled, largely obviates the continual struggle which is the popular notion.

As an example of the co-operative idea in plants, nothing is more perfect than the composite. Each daisy-flower is of course a perfect example of family co-operation. But look down on this mass of composites colouring the slope. Almost every flower (a co-operative group itself) has a clear view of the sky. Stoop and make a sideways, raking, self-immersing investigation of the multitude. The flowers resolve themselves into a beautiful series of non-interfering planes. The stems diverge sufficiently, and the pedicels are so graduated in length that each flower finds a place where it can best enjoy life and thus be of most use to the species; for it must be observed that to stress the co-operative idea is not to introduce sentimentalism: it is expediency that governs matters in nature.



But expediency is not the ugly thing some people would make of it. The beauties of nature arise from expediency, and the beautiful in art must be wedded to it. Joy of life is expedient, for without it life does not fully function.

Liparia sphaerica (orange nodding head) varies remarkably in its times of flowering, but perhaps October may be said to be the middle month of its period.

Among the places where it is found are the eastern slopes above Kirstenbosch, on which it appears to flower rather late, the Constantia Corner, and the Silvermine Plateau. It appears to love outcropping rock and masses against the stone in large clumps. The height is three or four feet, and the stiff leafage grey-green.

The flowers are massed in heads which may contain up to fifty, and be the size of a fist. These are spherico-conical in shape, and the individual flowers are of the pea-flower type and orange in colour.

The mature heads nod down slope, and those in bud may be observed to be working round in order to do so; but on the level they hang in various directions. They hang over so completely that the lighting is by the sun shining on the bracts which form the base of the ball. These reflect the light and are of a rich winy or blood-orange colour. The bronze-breasted sun-bird will usually be found about the spot.

The great leguminous (pod-bearing) family (*Leguminosae*) to which *Liparia* belongs compels respectful admiration. It is composed of three great sub-orders—one with flowers of the familiar pea type and the other two including forms popularly known as mimosas, acacias, and wattles.





The first provides forms like gorse and broom, which brighten the moorlands of northern England, and the glorious kafirboom, of which a magnificent specimen stands in a street in Uitenhage. It resists drought, as we see in lucerne, and gracefully repays for moisture as in *calypttrata* and *Psoralea*. It is the object of an aesthetic cult in the sweet-pea and is worshipped by the epicure in feasts of spring, along with the lambkin and the duckling.

Coming to the other sub-orders, it eats up sand in what we call "Port Jackson willow," and brightens the streets of Durban as the flamboyant tree. It resists drought on the plains of Central Africa, and is probably responsible for the giraffe's neck.

How are these varied wonders accomplished? The strong point which is common to all the tribes appears to be a grand discovery made by the founder of the family—the discovery that microscopic organisms could be called in to its assistance.

Pull at one of the roots of a Port Jackson willow, a portion of which is exposed on the sand. Out of the loose stuff in which it grows you may, perhaps, pull out several yards—a long thin, flexible rope. Examine it, however, and you will find here and there fleshy nodules. These are the homes of the bacteria; and in return for this settlement of its housing question, the germ manufactures nitrogen for the plant from the air present in the soil.

Painted ladies (especially *G. blandus*) continue to be plentiful this month, and a fine place to see them is the northern aspect of the Little Lion's Head or False Lion's Head.

The blue disa of the Flats (*Herschelia venusta*) is now in bloom. It is duller and more purplish in colour than its famous mountain relative (*D. gramini-*

folia), but is nevertheless a very attractive flower and a great favourite in localities where *graminifolia* is not known.

A picturesque heath (*Erica halicacaba*) flowers on Table Mountain in October. It is scarce and found only among rocks, where in form it often resembles an ancient Japanese dwarf tree. The bells are large and greenish-white.



PROTEA CYNAROIDES (*Giant Protea*)

*

NOVEMBER

PRINCIPAL FLOWERS IN BLOOM.

Watsonias :

* (rosea). (77)

* (humilis). (74)

* Painted Ladies. (37)

* Pink Bell. (42)

* Aristeia. (11)

* Orange Nodding Head. (57)

* Blue Water Lily. (63)

* Rochea jasmineea. (73)

*

WILD FLOWERS OF THE CAPE

NOVEMBER

Watsonias are now in profusion, and *W. rosea* (the rosy-pink species), always plentiful, in some years makes a most wonderful display on the western slopes. The tall flowering stem of this plant grows four or five feet high, and bears a large number of flowers, which orientate down-slope.

On a certain wet morning, as we ascended the western slopes, masses of the flower came into view through the mist like a floral dawn, while bits of blue sky were well represented by clumps of tall *Aristea*. On another morning fields of this flower were illuminated by the sun shining through them, bringing back a childish memory of an illuminated fairy scene in a pantomime.

The colour of these flowers when cut is not to be compared with the fresh rosy pink of the newly opened spikes, and in further explanation of the brilliance of the scene it may be mentioned that on these slopes the flowers open facing west, so that the morning sun shines through them from behind.

On turning and looking down slope, the effect is suddenly lost, and instead of an illuminated rosy pink the tone is dull magenta.

The rosy-pink *Watsonia* and tall *Aristea* (*capitata*) are apparently always found together, but the former





is much the more numerous. *Aristea orientates* its sky-blue flowers all round the stem.

Travelling round to the east we find the plateau above Muizenberg glorious with flowers. Orange nodding head, which always seems to grow against a rock, is sometimes visited by the malachite sun-bird, which, however, is more usually seen at lower levels.

The pelargoniums are magnificent, while numerous ixias, yellow legumes (very like the gorse of northern latitudes in general effect), orange composites, and the silvery everlasting all contribute to the general effect.

The little *Watsonia (humilis)* is in profusion in suitable spots. It favours a flat place or slight depression, but is also very numerous above Kasteel Poort on Table Mountain.

The painted ladies make one rejoice by their profusion in particular places. These flowers, however, are dainty as to position and are seen only on slopes with a northerly aspect. With their solid colouring they do not need a through lighting, but face the sun and show up well with reflected light.

One day we met a flower-seller searching for everlastings. He was of mature years, with a sun-dried countenance, and harmonised well with his surroundings as he prepared for a smoke. "The sun will open them soon," he explained. "We sell some dyed and some plain; they go as far as England." His knowledge of the Mountain was obviously exhaustive; "Yes, the flowers were good this year; there were plenty of pink papies in the vlei." He reminded one strongly of the men to be found in an English village, whose innate love of the open-air and natural bent for observation tempt

them to make a living in ways abhorrent to the Squire. He professed acceptance of the situation as regards wild-flower protection, and certainly the painted ladies spoke up for him: they were there when he had gone.

The everlasting spoken of is *Helichrysum vestitum*, a beautiful silvery flower of the composite family. The pink papie would be *G. inflatus*, a pretty gladiolus of the painted-lady type, but slighter and of an inflated bell shape; colour pink with redder spade mark. It blooms on the Muizenberg Mountain this month.

An unspoiled field of the small *Watsonia* mentioned above is a very bright and pretty sight. The flower is of the salmon-pink type of colour, and when measured the spike is found to be twelve or eighteen inches above ground, although it does not look so much. It never seems to crowd, but covers level dampish places with the leafless single spikes which orientate variously and always seem to space off in loose formation.

Besides the places mentioned above it may often be seen to advantage this month near the top of Nursery Ravine and between that and the Wynberg Reservoir on Table Mountain.

We referred in September to a Cape grass bird's nest with eggs; in November we find the young on the wing.

Having sat some little time one day on an open sunbaked eastern slope, we became aware of a repeated chirp close at hand. The unity of the nervous systems on this planet betrayed itself in the assurance we felt that it was a sound of distress. Searching quietly we at last found a young bird, soft and mottled, sitting on a twig within easy reach.





Its mouth still pouted with the yellow flanges at the sides, and, opening its beak, it called again. The fact was that our presence had kept the cautious parents away, and that it was very hungry. Utterly dependent, all it could do was to sit still and utter its insistent appeal. It was so hungry that it hesitated whether or not to approach us, but, eventually deciding differently, it fluttered away to a little distance, steering not too well with half an inch of tail. It was a young Cape grass bird; a week later we made its acquaintance again, about the same spot, and saw the mother grass bird feed it on a large green mantis (well punched).

Scarlet crassula (*Rochea coccinea*) will be in, bud at the end of the month, and its pretty white fore-runner *Rochea jasmineea* will be already in bloom.

Blue lilies will be rising from the water this month. This flower (*Nymphaea stellata*) does not sit on the surface of the vlei or pool, as do some species, but is raised ten or twelve inches above it. Thus when the water is still the flowers give a reflection which greatly adds to the charm of the picture. They grow in a ring round some vleis against the bordering reeds, and to appreciate their dreamy charm to the full one should be swimming in such a lake.



At this time of the year, when we approach fairly tall dense bush on the lower slopes of the Mountain, a considerable area will sometimes seem to be quietly vocal. On examination it will be found to be full of young long-tailed sugar-birds practising their song.



ROCHEA COCCINEA (*Red Crassula*)

*

DECEMBER

PRINCIPAL FLOWERS IN BLOOM.

- * Drip Disa. (26)
- * Disa barbata. (22)
- * Disa harveyana. (25)
- Painted Ladies. (37)
- * Watsonia. (77)
- * Antholyza nervosa. (6)
- * Scarlet Crassula. (72)
- * Rochea versicolor. (74)
- * Rochea jasmineea. (73)
- * Bloodwort (Haemodaceae). (20)
- * Harveya (pink). (53)
- * Everlastings. (54)
- * Orange Nodding Head. (57)
- * Pelargoniums. (65)
- Giant Protea. (67)
- Blue Water Lily. (63)
- Agapanthus. (1)

*

WILD FLOWERS OF THE CAPE

DECEMBER

The more famous species of *Disa* are the drip disa (*longicornu*), the red disa (*uniflora*), the blue disa (*graminifolia*) and the cluster disa (*ferruginea*); and this month we begin to think of them, though very likely we shall see in full bloom only the harbinger of the group, *longicornu*, which will now be found sticking its mauve cup from the sides of the mossy slabs of krantzies with a steady aspect. The same fancy which regarded the mistletoe as the spirit of the oak might certainly regard this disa as the gentle soul of age-old rock.



An excellent and very accessible place in which to see it is the southern-aspect krantzies near the top of Kasteel Poort.

Disa harveiana, a beautiful mauve-ground species, may also be found this month near the same place.

Scarlet crassula (*Rochea coccinea*) is in bloom in early spots such as the Lion's Head. As this pinnacle is bathed by direct sunshine practically all round during a day at this time of the year, one might imagine it gets warmed through!

Watsonia rosea is now seen chiefly at the top of gorges, where it meets the *Watsonia* of the upper levels (*meriana*).

The little "soldier" *Antholyza* (*A. nervosa*) now decorates the lower slopes, and small quantities of *Agapanthus* are still to be found there.

Rochea jasminea, a pretty white form of crassula, which precedes its red cousin, is now in full bloom, and an excellent place to see it is the slopes above Kirstenbosch on the eastern side of the Mountain.

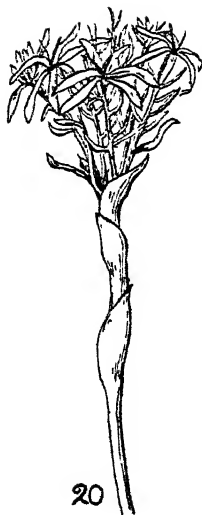
Bloodwort, silver everlastings and golden, are the features of the Silvermine plateau in mid-December.

The first-named (*Dilatrix corymbosa*, family *Hæmorrhodaceæ*) has a flat head of purplish-lilac flowers with an orange-red eye. The apparently compact head may be five or six inches across, and is really composed of nine or ten spikes of six or seven flowers each (about the size of a shilling) which so arrange themselves that all the open flowers are more or less on a level, and each has a clear field. Two of the three anthers of the flower are orange-red, and the other golden-yellow. The red ripens first.

The whole inflorescence, except the inside of the petals, etc., is covered with a silken pelt which adds a sort of hazy softness to its appearance. The softness, however, is external only, for the stem breaks almost like reddish wood, and the leaves, bracts, etc., are all tough.

The flowering stem may be eighteen inches high, and the shorter leaves which spring from the ground are of the sword-shape type. The family is cousin to the *Iridaceæ*. It is in very great force both on the eastern slope and the plateau.

The everlastings are of the composite (daisy) family. The everlasting part is composed of bracts, and the centre of a fresh flower can be seen with a



little magnification to be composed of scores of tiny flowers which stand in orderly array on a cushion-shaped support.

The silvery *Helichrysum* (*vestitum*, as mentioned last month) is the species which is exported and used for the making of wreaths and crosses. It grows in clumps which are thickly dotted about parts of the Silvermine Plateau. The flowers, which spread themselves open when the sun is high, are all in one plane, and make a field of silvery sheen; they are certainly a more beautiful sight while living their life than when pressed into the service of man's barbaric taste. The golden-yellows, on the other hand, are sprinkled over the veld, and in many places are in lovely profusion.

Orange nodding head is in full bloom on rocky outcrops; and the pelargoniums, from the tall purple to the daintiest pinks and whites, proclaim that this is pelargonium time and pelargonium land.

Pink *Harveya* does not flaunt itself, but spied among the wiry undergrowth it irresistibly attracts. The tube-and-salver-shaped flowers look sideways from the stem which they surround, and have all the delicacy which usually pertains to a beautiful parasite—for such the *Harveyas* are, attaching themselves to the roots of other plants, and themselves dispensing with those parts of a plant which wear the working uniform of green.

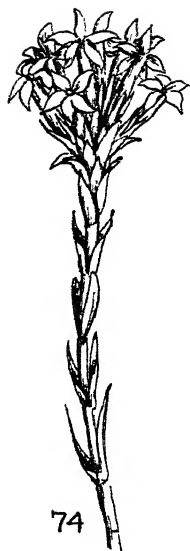
The find of the day, however, may be expected on nearing the river. There the most delicate of the blue disas—*barbata*—raises here and there one, two, or as many as four blooms on stems so fine that they seem to have disdained material support. The colour of the hood is really a very light and delicate mauve, with darker veinings, and the lip is a pure



white beard closely curled like a tiny replica of one from a Greek statue.

Marloth says that this species blooms in spring on the Flats. Perhaps the later season in this instance is to be referred to the altitude, as we saw in the case of the flames.

Scarlet crassula has a beautiful cousin (*Rochea versicolor*), the colour of which is mingled pink and white. Instead of courting the hot sun, however, and flaunting out of baking krantzes, this form, which is rare, grows on a southern-aspect slope, where there is plenty of grassy vegetation, the flowers only just appearing at the top of the green investiture in which the plant grows. One place in which it grows is a ravine between the end of the Forest Department plantations and the Chapman's Peak saddle.





(1) ERICA PREGNANS
(2) ERICA VERSICOLOR

*

JANUARY

PRINCIPAL FLOWERS IN BLOOM.

- * Watsonia. (77)
- * Painted Ladies. (37)
- * Agapanthus. (1)
- * Scarlet Crassula. (72)
- * White Harveya. (53)
- * Red Disa. (27)
- Blue Water Lily. (63)

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Agapanthus is in full bloom on the Mountain in January. There is no intrinsic difference between the cultivated form of this flower and its wild cousin, but there is an astonishing difference in appearance between the tall lymphatic garden plant and the smaller mountain form with its passionate blue.

Agapanthus umbellatus belongs to the lily family (*Liliaceae*), and, though in some spots it makes a finer display than others, it is found on most parts of Table Mountain and on the Silvermine Plateau. On the Mountain easily accessible places for it are the Saddle, Kasteel Poort, and from there along the rocky outcrops towards Slangolie or near the Wynberg Reservoir on the eastern side.

There is no such difference as in the case of *Agapanthus* between the scarlet crassula (*Rochea coccinea*) on a rockery and on the Mountain, but here again the colour never seems to be quite the real thing in the garden. It is dry and dead compared with the luminous and vivid scarlet on the Mountain.

It cannot be said to be in full bloom at the higher altitudes till the end of January, and a feature of the plant is the uniformity in time with which individuals come into flower over the Peninsula. During a week ending 16th January, numerous specimens were seen on Table Mountain, Lion's Head and Muizenberg, and they were all apparently at exactly the same stage—i.e., in bud, with colour just showing at the tips.

The plant varies considerably in size, sometimes growing two or three feet high; and the heads, which may be composed of from twenty to forty flowers each, may be as big as saucers. The heads are as a rule composed of two or three branches, but all

the flowers are fitted together on one level, and the whole is orientated according to position. Growing on level ground, it looks straight up; a row of plants growing in a crack on the curve of a boulder will each be perpendicular to its own position on the curve, as a jeweller would set points on the rim of a locket. Growing on the side of a krantz, it looks straight out; then the vivid colour, with which perhaps no other plant can compare, strikes the eye at a distance, and this no doubt is the object—though not to catch the eye of the human. Often the base from which a large plant grows is a small pit in a rock; but the heads of flowers produced are always well separated, and there is no waste of effort by interference. Sometimes fifteen or twenty heads may be counted in one such group on a rock.

There are few parts of Table Mountain or the Muizenberg range where this plant will not be found in rocky situations, and it appears just as happy south of a rock as north.

The later painted ladies are *Gladiolus Pappi* (Christmas painted lady) and *G. tabularis*, both of which may be found at the higher altitudes in January.

The former is one of the most beautiful species, being like *G. blandus* (which is probably the best-known form), but with a delicate pink flush over the whole flower, so that if it were called the blushing lady the name would be an appropriate differentiation.

Tabularis is a small and delicate gladiolus, the flowers being raised on a slender stem about eighteen inches high. It is salmon in tint, and the spade-mark is outlined in red but filled in with yellow.

The Christmas painted lady is found in reedy places on Table Mountain, and this is another flower



which may be seen on the terrain near the top of Kasteel Poort.

Tabularis is fonder of rocky outcrops, and quite a line of these pretty "papiés" may sometimes be found against a rib of rock.

The fussiness of a pair of wren warblers is well known, but it amounted to hysterics in the case of a pair we noticed on 3rd January, and seemed to compel a halt for investigation. At the moment there floated waveringly through the bush two or three little feather balls, flapping tiny wings, reminiscent of cherubim in the upper part of a picture. The tailless creatures had evidently just left the nest.

The excitement of parent birds at this critical juncture is always intense, and would seem to indicate a real prevision of the dangers on the one hand and the growing joy of life on the other, which will be the lot of the youngsters during the ensuing few weeks. We cannot believe there is conscious prevision, but this much is certain, that instinct involves much more than the mechanical accomplishment of the duties and functions necessary for survival. Its functioning is accompanied by emotion, and in many instances emotion to all appearance as strong as our own. It is at this point that we ourselves find a companionship in animate Nature that is complete and undeniable.

But the division into animal and vegetable kingdoms, is of course, purely artificial and arbitrary; indeed, many philosophies very naturally cannot find a place where a water-tight partition could be inserted between the conscious and the non-conscious. For ourselves, the acceptance of an immanent consciousness is our only way of reconciliation when,



for instance, after the wren warbler we meet the display of *Rochea coccinea*.

Red disa buds are numerous on Table Mountain in January, but there are never many open blooms until February.

The following note indicates the state of affairs in January in the terrain south of Constantia Nek, and incidentally gives some idea of the pains which a talented and patient photographer of wild flowers *in situ* has to take to get one good result.

The observer took a photographer up to the Silvermine Plateau to photograph the red disas; but, alas, a fire had swept over the stream, which was practically dry at the time, and scorched the buds. Trekking away from the area of the fire, we found the everlastings in extraordinary profusion from silver to golden straw. The little *Aristea* with its lovely blue was also numerous. As we trudged along, we opened out a line of hoary rocks away to the left, and the sight-compeller, scarlet crassula, was immediately seen by both of us. One piece catching the rays of the sun was scarlet glorified.

An anxious examination by the expert, however, resulted in the technical difficulties of getting a photograph being pronounced too great. The more expert the photographer, the greater his "difficulties." A simple man with a camera does not seem to find them!

Continuing the route, we passed the well-known waterfall. It was dry, however, and proved also to be dry of inspiration. Trek resumed.

We were now making for Farmer Peck's Valley, and as we skirted a rather bare and stony slope we were struck by something, and halted as a pointer would. It seemed like a little tower or pagoda



carved deep in mellow marble. Some new orchid? No, *Harveya*—a wonderful clump formed of three plants interlaced!

The photographer arose and unslung the camera. “Difficulties” were indeed spoken of, but only as crosses which must be borne. That clump had to be photographed.

We shall find *Harveya capensis* again next month.



GROUP OF IXIAS

*

FEBRUARY

PRINCIPAL FLOWERS IN BLOOM.

- * Red Disa. (27)
- * Blue Disa. (24)
Cluster Disa. (23)
- * Scarlet Crassula. (72)
- * *Harveya capensis*. (53)
Giant Protea. (67)
Agapanthus. (1)
March Lily (*Belladonna*). (8)
Blue Water Lily. (63)

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WILD FLOWERS OF THE CAPE

FEBRUARY

This is the principal month for the red disa, fondly called the "Pride of Table Mountain" by residents in the Peninsula. It is not, however, confined to this mountain, but is also found in the mountains to be seen across False Bay. It is sometimes called *Disa grandiflora*, which would be the most appropriate name, but the misleading name *Disa uniflora* is the one which has become attached to it by the rules of botanical science owing to that name having been bestowed upon it by Bergius, the botanist who first described it in 1767.

This beauty has excellent taste in the choice of a situation, and in fact simply declines to grow except in positions which redouble her charms.

Whether poising at exactly the right angle over the water of a pool in its summer stillness, or making one of a resplendent company on a series of drip krantzies, she has the art, disguised under the happy abandon of the supreme actress, of making a foil of beautiful surroundings.

A waterfall which laves the roots in winter, and which in summer is refined to a jewellery of sunlit drips, spinners and splashes from moss to rock,



When one turns from our lady *Disa uniflora* to the blue disa of the Mountain (*graminifolia*) one smiles as one would in turning to a child. In wistful beauty of colouring this flower has no rival; sometimes a little darker, sometimes a little lighter, its blue has always the brightness of the blue of a summer sky. The small blooms, an inch or a little more across the wings, are borne, to the number it may be, of seven altogether, with three or four in their prime, on a slender reed-like stem about two feet high—so slender and elastic that the flowers are seldom if ever still. They orientate in various directions, each flower generally taking the view at right angles to the one beneath it on the stem. It is the hood and wings which are blue and catch the eye at a distance. On closer examination will be seen the lip, which is streaked mauve and purple.

The bright red *Antholyza (lucidor)* is quite in profusion at the end of February in Farmer Peck's Valley and beyond, and the bronze-breasted sunbird displays itself as it hangs on to the stems, which, as a rule, are just stiff enough to bear the bird's weight with a little swinging, as he searches round the cupola of flowers.

Disa graminifolia, scarlet crassula, and *Harveya capensis* are also to be seen, with the small blue aristeia and everlastings in profusion.

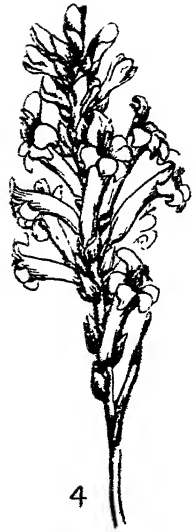
Easily accessible places where the red disa may be seen are, on the eastern side of Table Mountain, the drip krantz at the top of Skeleton Ravine (left hand side). This is part of the Kirstenbosch Nature Reserve. On the west, Slangolie and about the intake on the Disa Gorge side of Slangolie, the top of Kasteel Poort, and the streams thereabout. A more difficult but splendid place is Window Gorge,



also part of the Kirstenbosch Reserve; this requires an experienced guide. South of Constantia Nek they are to be seen in the Silvermine River.

Blue disa (*graminifolia*) grows on the rocky-outcrop parts of the top of Table Mountain, and may be found about the reservoirs. On the Silvermine plateau it is to be looked for on the eastern side koppies.

White *Harveya* is usually found on a north or east aspect slope, but often on the level. It seems to like coming up against a trodden track. Easy places are near the reservoirs on the eastern side and from the top of Kasteel Poort to Slangolie on the west. On the silvermine Plateau turn to the left at the top of Farmer Peck's Valley and search the northern-aspect slopes near at hand.





GROUP OF SPARAXIS

MARCH

PRINCIPAL FLOWERS IN BLOOM.

- * Red Disa. (27)
- Blue Disa. (24)
- * Cluster Disa. (23)
- Blue Water Lily. (63)
- Giant Protea. (67)
- Harveya capensis. (53)
- * Belladonna, or March Lily. (8)
- Nerine. (62)
- * Buphane ciliaris. (18)

WILD FLOWERS OF THE CAPE

MARCH

This autumn month presents perhaps the most gorgeous combination of the year, for, though scarlet crassula and the red and blue disas will be disappearing during the month, and nerine only coming in, it is nevertheless possible to see all these and *Harveya capensis*, while the cluster disa should be in profusion.

The cluster disa (*ferruginea*) may be said to be the mountain flower of the month, as the March lily (*Amaryllis belladonna*) is for the lower altitudes.

That *ferruginea* is a very attractive flower is shown in the usual sad way—viz., that the unregulated human hand immediately grabs at it. Yet the reason for its fascination is not so obvious as in the case of *uniflora* or *graminiflora*. Why, for instance, should it be immediately preferred to the smart bright-red little *Antholyza* (*lucidor*) which is difficult to distinguish from it at a distance? *Lucidor* has a head of flowers about the same size as the disa and of a brighter colour.

There are places where they grow sufficiently near together for a comparison *in situ*, and subtle differences at once appear. *Lucidor*'s bright red is by reflected light only, and its coarser texture is





thereby revealed. The disa with a more refined and tender texture knows how to glow with a through lighting and turn its colour into that of a clear flame.

But perhaps this disa's deepest secret is that of form. The pretty contemporary with which we are comparing it has nearly regular tubular flowers, straightly disposed to form a cupola round the top of its stem. The flowers of the disa make a similar cupola in external periphery, but their disposition is that of a cluster resolving itself into a cunning jumble of interlacing curves such as forms the natural basis of some of the everlasting patterns in art.

About twenty flowers are borne on the stem, which is about twelve inches high. There are the hood, wings and lip of the other disas, but the wings and lip are small, while the hood is narrow and prolonged, being extended behind into a long fine horn, while the midribs of both hood and wings are extended in front into little free antennae. The flowers sit on their little soft-tinted pedicels at various orientations, making, with the appurtenances described, a cluster of a delicate intricacy which delights the eye like rhythmic motion.

The plant usually protects its tender-textured blooms and ensures their display by growing on or against a small rock or boulder. It is visited by a butterfly, but the red antholyza (*lucidor*) is a favourite with the bronze-breasted mountain sun-bird.

Many names of flowers refer to the other chief exponent of the universal beauty, and belladonna (*Amaryllis belladonna*—*Amaryllidaceae*) is a conspicuously fit example. There is a considerable patch of this flower on our Lion's Head Reserve, but it

grows in a practically wild state in so many gardens, old cemeteries, and fenced-off fields, that its appearance is familiar to everybody.

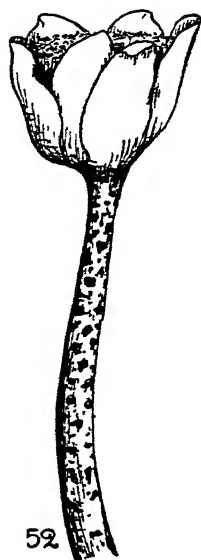
A strong stem about two feet high bears an umbel of seven or more large trumpets of the typical "lily" shape of flowers which, upright in the bud, bend over as they open into the "loud speaker" attitude, so that the flying moth will meet the scent and see into the trumpet from afar. On an open level they make their appeal to all points of the compass, but if the light is better in a certain direction the flowers all turn round towards it.

It is her complexion which is perhaps the chief charm of this "beautiful lady." Sometimes pale and pensive, more often the ready pink runs up the petals in a way to charm the lover, sometimes deepening into a blush.

Amaryllidaceae is a family which achieves great distinction in the autumn. *Haemanthus*, some species with stem spotted as though to resemble a snake; chandelier plants (*Brunsvigia*), belladonna and nerine all belong to it, thus owing to some remote common parentage.

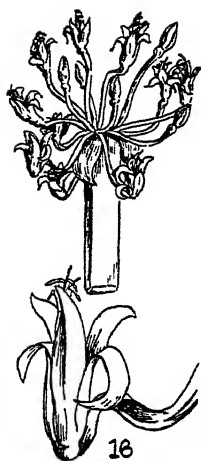
Economy of stems is a characteristic of the family; they turn the stems of from ten (in *belladonna*) to over a hundred (in *Buphane*) flowers into one column of a nearly round, or very much flattened, oval in section, on the top of which the flowers form an unconstrained capital.

There are two or more (according to the genera) coloured spathes or wings at the top of the column, which after having served as a protection for the buds usually turn back and more or less efface themselves; but in *Haemanthus* they persist and convey the illusion that they are large tulip-like petals.



They form the attraction here, and between them the little flowers are huddled on tiny pedicels.

Then come various stages in handing out, as it were, the flowers of the capital, as, *e.g.*, in belladonna and nerine, then the Malagas lily (*Ammocharis falcata*), and finally the great Chandelier plant (*Brunsvigia gigantea*), in which they are handed out to all points of the compass on brackets nine or twelve inches long.



Buphane ciliaris, a much smaller but very quaint and interesting form of this type, flowers this month on our Lion's Head Reserve. The stem is a column of very flat oval section an inch broad and about four inches high. There are the usual two wing-like spathes, which turn themselves down after having fulfilled their purpose; and between them from the top of the column radiate in all directions, except at too great an angle downwards, over a hundred pedicels about three inches long, with a little flower at the end of each, while there may be nearly as many more pushing up at various lengths with buds.

The petals of the small flowers turn back and assume a dark-coloured withered appearance as if their work were also finished when the bud was open. The anthers are conspicuous and dark purple, and ripen before the stigma. The pedicels or spokes, as we might call them, keep their distances carefully, and each grows to the length required to place its flower on the periphery, which forms a regular dome of more than a half-circle.

The spokes form the colour attraction for distance. They are three-angled in section and translucent, with the colour of claret and water. The sunlight is trapped in the maze of spokes, and

the ball glows with a gentle fire which catches the eye at once.

There is no doubt about the visitor catered for; it is the honey-bee, and I have never watched the plant long without the bee turning up. The busy bee is encouraged to visit as many of the flowers as possible by getting just a lick of honey at each, and one I watched made 122 calls over the dome, visiting a few of the flowers twice.

When the flowering stem appears, the leaves, as in other members of the family, have withered and disappeared. They are of the *Haemanthus* type (flat slipper soles) with "eyelashes" on the edges.

One day late in the month our objective was a drip-krantz which crosses a ravine on the eastern side of the Mountain. The way is shady owing to a close growth of native trees, and the colouring sombre; but before the krantz the sun breaks in, and a glance showed that there were patches of scarlet. The mossy and ferny krantz was flooded with sunlight, and, the sun being well up, the disas, some of which could easily be reached, got a through-lighting from above, which made their wings glow with living fire. The sunlit drips and a couple of large butterflies were attendant jewels.

A feature was the number of developed fruits. *Disa uniflora* does not appear to fruit in all situations, and many people in fact are under the impression that it never produces seed. The fact appears to be, however, that the visiting butterfly likes clear open spaces, such as before a drip-krantz, and dislikes diving beneath the fringing vegetation of a stream. In the place now described there did not appear to be any failures, and one group of five well-developed pods low down on the rock was especially



noticeable. A tree-fern and groups of pretty pink pea-flowers on brown-like stems added to the beauty of the spot.



Out on the slopes *Antholyza lucidor* lifted his red fez above the bush, growing three or four feet long, if necessary, in order to do so. The pretty pink papie appeared delicately here and there. On the top *Disa ferruginea* caught the eye at once. A through-lighted specimen was glowing on an isolated rock. This flower is one thing when the sunlight is shining through it, and quite another when the observer is standing between the flower and the sun. In the one case the delicate cluster is illuminated as if by an internal light; in the other, the colouring is flat and dead. The sentinel position the flower adopts, on or against a solitary rock or small boulder, protects it from crowding, and favours the free illumination by which, no doubt, visitors are attracted. On close examination it will be found that the petals, especially the hood, have a sparkling sheen.

Disa ferruginea may be seen in rocky-outcrop places all over the top of Table Mountain, for instance, near the Wynberg reservoir and in similar situations on the Muizenberg and Kalk Bay range.



DISA LACERA (*Herschelia Venusta*)

*

APRIL

PRINCIPAL FLOWERS IN BLOOM.

- * Nerine. (62)
 - Belladonna Lily. (8)
 - Buphane ciliaris. (18)
- * Malagas Lily. (9)
- * Giant Protea. (67)
 - Sugar Bush (*P. mellifera*). (70)
 - Black Protea (*P. lepidocarpodendron*) and others of this family. (69)
 - Arum. (12)
- * “Pink papies.” (42)

*

WILD FLOWERS OF THE CAPE

APRIL

This is the month when the giant protea (*cynaroides*) is probably at its best, and the nerine is in greatest profusion. With many people the latter beautiful flower is the prime favourite of the yearly circle, eclipsing in their estimation even the red disa in all its pride.

From the pipe track what could look more barren than the dry rocks and upper slopes that we gaze at speculatively? However, with previous experience to guide us we plod on. Detail is filled in as the krantzies are approached—pink papies, ericas, and protea bushes deny the reproach of barrenness, but there is still no sign of what we are looking for. Wandering along the broken upper slope we gaze and wonder; then they suddenly come into view, as flying birds may become distinct by a turn. Nerines, literally hundreds of them, at hand on the slope and jewelling the krantzies above. The photographer is soon busy, his only complaint being that the selected specimens will not keep still.

It is perhaps only when struck with compassion for the woes of a flower photographer that one realizes how very rarely the flowers are without considerable movement.



The nerine, with a head of sail, so to speak, on the top of a slender elastic stem, is for ever more or less vibrating. Movement catches the eye, perhaps not excepting the eyes of butterflies, so that this condition may have its use in accentuating the colour attraction.

The head of flowers is orientated parallel to the plane from which the supporting stem issues, the stem adopting a position approximately perpendicular to that plane. Thus, if the observer stands before a perpendicular rock from a cranny in which the nerine is growing, the flower looks him straight in the face. A neighbouring flower on a horizontal ledge looks up at him, as he looks down on it.

Not a through-lighting, but a direct reflection of the sun's rays, is what the flower requires to realize its beauties, and in the position adopted it waits for the sunlight to strike upon it in its turn, for *Nerine sarniensis* does not favour situations in which it gets the sun all day.

The usual number of the flowers forming the head is five to seven, and these, slightly divergent, give the umbel the diagrammatic outline of a shallow dome, from which the grouped stamens and style of each flower stand out boldly in so many coloured and slightly diverging columns. The petals are rolled back, and hook over and interlock with those of the other flowers of the head, thus forming a decorative unity of interflowing curves. A knuckle is also thus presented by each backward-bending petal which catches the light in particular, and glitters with the gold-dust effect for which the flower is famous. The satiny colouring varies in individuals from pink to scarlet. White specimens have been observed.



The nerine belongs to the amaryllis family, and is to be seen on semi-shady aspects on the Lion's Head, Table Mountain and the Muizenberg and Kalk Bay range. Perhaps the easiest place is on the Lion's Head Reserve from the path among the silver trees. Among easy ravines on Table Mountain it grows in Platteklip, Blinkwater and Slangolie.

Though it is often seen projecting from crannies among the krantzies, it is the slopes and lower ledges immediately beneath such which are the most prolific terrain, though unfortunately it is in these accessible situations that its numbers have been most reduced.

Out of evil is sometimes plucked good, and the fire of 1923 on the Lion's Head was the occasion of an interesting re-discovery as regards that area. The casual observer would probably call the plant a belladonna lily, but would note the shortness of the stem. It is, however, not the belladonna, but a first cousin, and the botanical name is *Ammocharis falcata*. It has a broad flat stem, and this stem, which, as in similar cases, is really a number of stems fused and sheathed together, produces an umbel of from twenty to as many as forty flowers. It forms in appearance a link between the belladonna and *Brunsvigia* (the chandelier plant), and it is very interesting to observe how the cousins of the amaryllis family—haemanthus, nerine, brunsvigia, buphane, belladonna, and this—tend to run into one another. Autumn blooming, the flowers are so arranged as to co-operate in making a conspicuous object, though the sun may be obscured by clouds or mist. They also make the most of what sunlight there is by orientating the head of flowers to all points of a



dome. *Brunsvigia* and *buphane* (the chandelier plants) are the most outstanding examples, and in them hospitable thresholds are thus presented to insect or sun-bird visitors in every direction that is possible.

Dr. Marloth gives the common name of *Ammocharis falcata* as "Malagas lily," and says the old people about Hout Bay called it by that name because it grew beyond Llandudno, opposite a rock called Malagas Island.

The giant protea is now in splendid profusion on the Mountain, and forms a fine object, even in the distance.



P. cynaroides is usually a low bush on the top of the mountains, but in ravines it sometimes grows ten or fifteen feet high, and some plants carry many of the fine heads of flowers—I think twelve is the most I have counted. The head is usually nine or ten inches in diameter when open, and the surrounding bracts (involucre) are flushed with a pink or reddish colour. The plants vary in the depth of colour which they produce, and sometimes specimens with white heads may be seen. The florets are packed within the ring of bracts in a conical mass which gradually disintegrates as the flowers bend back and become mature—the outer ones first. The exposed styles then become a prominent feature. The anthers are attached to the inside of the spoon-like perianth segment.

The visitors are sunbirds, and they perch on the central cone while they dip among the ring of mature flowers for the nectar provided. A malachite sunbird thus occupied, and the flower, make a brilliant picture in the sunshine.

The general aspect of the mountains during this month deserves attention. On a fine autumn or winter morning the sun illuminates the krantzes with a clear bright light which makes every detail sharp. On the western side of the Mountain the krantzes light up in succession as the sun approaches the north. It is then pretty high up and shines down on the nerines, which are waiting in the right position to receive it full on all their glinting petals. Things by this time have warmed up, and with the rays of the sun come numbers of butterflies, which are the pretty messengers of the loves of the flowers. Pink papies (*Gladiolus brevifolius*) are dotted about the slopes, very dainty and all facing west on the slopes which look towards the Atlantic and the afternoon sun.

On the eastern side *P. cynaroides* grow tall in the ravine, reaching ten or fifteen feet, and carrying many fine, fresh-complexioned heads newly spread open to invite the sunbirds.

A graceful broom-like plant with pink-purple pea-flowers flourishes in the moist spots. It is partly in fruit, and the very numerous slender pods hang freely and gracefully.

On the top a low-growing bush of *P. cynaroides* met suddenly behind a rock is arresting in its beauty as we look down upon a wide open but delicately fresh head ten inches in diameter. The cluster disas are past their best, but their fruiting made a cheerful sight. Anemones are beginning to push up the stems which will later bear flowers.

A pair of ravens come over to see if we are peradventure lunching, in which case they will come down on our departure to look for fragments. They fly close together and plane one over the other like



cards when they are being shuffled, the white napes every now and then catching the sun.

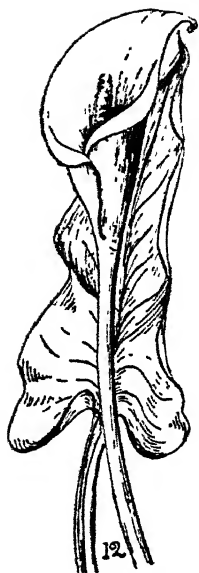
A family of rock-thrushes are violently abusive. When uttering their objurgations as they sit on a rock, they make themselves look as reptilian as possible, holding their long head and beak like a lizard. At each squawk they thrust out their "chins" and give a flip of the wings, and nip round to different points of the compass. As their harsh voices remind one of a rock-rabbit's, perhaps this tone is considered suitable among the rocks.

On the Muizenberg Mountain also *P. cynaroides* is in form, a contrast being offered in one place between a bush carrying two deeply-coloured heads and several graceful buds and a bush with a large open head, white in colour.

The long-tailed sugar-birds' breeding season is now beginning, and a male bird is signifying the fact by hovering over a bush, with his plumes dangling gracefully.

Curiosity is such a universal characteristic of animals that it must have survival value, though it certainly has failed to take account of the modern weapons of man. Doubtless it is necessary for an animal to take stock of any strange invader of its territory and haunts, as the strange thing it finds in its path may be there another time. To bear in mind territorialism and its implications is an aid to understanding many characteristics in wild creatures. That the muishond is full of curiosity was well exemplified one morning when I was climbing over a ruck of rocks and small boulders.

Thinking there was a snake among them at a little distance ahead, I froze and waited. In a few seconds it proved to be a muishond, long, lithe and



grey, with its fine long tail furred to look as thick as its body.

Soon catching sight of me, it gazed intently, then, popping down among the rocks, popped up again a little nearer; the movements of the animal were like quicksilver in a skin. Then it reared its long body to the perpendicular and tried to get the scent, but the air did not help it. The same processes were repeated a number of times, until, having circled a little, it was gazing at me intently from a distance of three paces on my left and I could count the hairs of the speckled grey coat which was so expressive of vigour and health. Its eyesight did not appear to tell it what I was, and it wiped its chops with its moist red tongue two or three times.

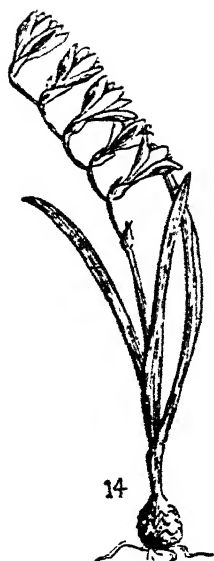
After we had stared at each other for what seemed an age, perhaps I moved, or perhaps a puff of air settled the matter, at any rate, it suddenly scuttled off.

It was interesting to find a rock-rabbit up a tree—not a procumbent log, but a small native tree growing among the rocks. There is, of course, a species of hyrax which is arboreal, and in incidents like this one sees the raw material of differentiations which lead to new species.

Variations in animals are often mental, and a mental variation may as easily start a new variety as a physical one; as when a bird of the wren family takes to water and leads to the production of the dipper or water-ouzel of European streams.

Plants are as much alive as animals, though we do not talk of their mentality. It would be difficult, however, to say that the life of a plant is not governed by instinct just as much as that of the lowlier animals, and of course no water-tight parti-





tion can anywhere be placed between the "lowlier" animals and the "higher."

The depth at which bulbs are situated in the ground varies in different species of plants; and if soil has been washed away, or added to, about the stem the plant can regulate the depth of the new season's bulb accordingly (Marloth, *Flora of South Africa*, Vol. IV.). The controlling factor is said to be light acting on the stem or base of the leaves, but when we ask how "perception" is transmitted to the bulb and how the plant "learned" to do this, we come to just the same blank as when we ask why a newly-hatched duckling swims. The variations by which this faculty was attained in the process of evolution would certainly appear to be as easily conceived in "mental" terms as in physical.



NERINE SARNIENSIS

MAY

PRINCIPAL FLOWERS IN BLOOM.

- * Brown Afrikanders. (47)
- * Red Afrikanders. (50)
- * " Papies " :
 - Gladiolus villosus. (49)
 - Gladiolus gracilis. (40)
- * Avondbloem. (14)
- * Anemone. (2)
- * Knowltonia vesicatoria. (55)
- * Arum. (12)
- * Oxalis spp. (64)
- * Woolly Head. (33)
- * Proteas. (68)

WILD FLOWERS OF THE CAPE

MAY

Our yearly chain of wonderful wild flowers suffers no interruption in its circle, but in the winter months there is an artistic diminution from its greatest opulence.

Winter, however, is the breeding season of many of the protea family, as it is concomitantly of the sugar-bird and sun-birds, and of such attractive flowers as the brown and red afrikanders. The white-spathed arum begins its long season of love and adventure, pushing up from the forerunning clumps of dark-green arrow-shaped leaves. The lovely oxalis family sprinkle the veld with sheeny reds or form clumps of exquisite harmony and beauty in white, mauve, or primrose yellow, according to nature's method of tapestry, and the blue babiantjes (often called crocuses) are tidal heralds of the coming invasion of spring.

The sugar-bush (*Protea mellifera*) is a widely distributed species in flower during these months, though there are parts where it never seems to grow, as, for instance, the Muizenberg Mountain. It grows on the Flats, on the eastern slopes of the Lion's Head, and on the front of Table Mountain, but I do not remember it on the western aspects of



either. On the western aspects and on the Muizenberg Mountain the black-bearded protea (*P. lepidocarpodendron*), on the other hand, grows freely. Both afford food to the breeding sugar-bird.

P. mellifera is perhaps the most attractive in appearance, with its tall vases of neatly overlapping bracts, each with its dark-pink flush. The bracts are viscid, presumably as a protection against the thieving ants. In *lepidocarpodendron* and other species a hairy pelt at the end of the bracts appears to have been developed for this purpose.

Perhaps the flower of the month is the brown afrikander (*Gladiolus maculatus*), as, although the red afrikanders are also in flower, they increase in profusion later. Brown afrikanders are found in all their freshness at the beginning of May. Owing to its peculiar colouring, this flower is not in ordinary circumstances one to be seen at a distance from the level of a man's head, and when we are tramping over a likely terrain we may find when we have quite given up hope that we have been standing for a time close to a beautiful specimen.

As we look round with new enlightenment, others will most likely appear as if by magic. The flowers are raised on a long stem, of wire-like slenderness, up to thirty inches or so in height, with the result that they respond to the least movement of air, and are constantly waving from side to side: this probably has a purpose in diffusing the scent.

The orientation of the blooms is down-slope; thus they gain the longest field of fire for hitting the senses of a flying moth. Both form and colouring in these flowers are very attractive to the aesthetic sense in man, but it may be the very strong scent which first attracts the notice of its insect visitors.



At the same time it is to be noted that they are arranged for a through lighting effect by means of the curved transparencies at the back of the roofing petal of the bell. Ascending a southern-aspect slope with the sun above it, and not at the time thinking of or looking for this effect, we are suddenly attracted by a shining little silver cavern above. It is our quiet afrikander, seen from the right position with the sun behind it, and one cannot but suppose that any insect flying up the slope would be attracted as by a tiny lamp.

The brown afrikanders are fairly plentiful on the Muizenberg Mountain, but they are not so fine as those on the Constantia end of the Table Mountain slopes. Red afrikanders at Muizenberg are at the foot of rocks with a more or less north aspect, orientated with their backs to the rock. They are usually of the species called *Gladiolus watsonius* by Marloth and *Antholyza watsonia* by Bolus.

The giant protea orientates its head like the pyramids—apex to the zenith. The apex is formed by the unopened flowers of the centre, and on this tempting cushion we have seen a malachite sunbird, flitting with his forked tail, alight daintily. He then proceeded with his long bill to box the compass for drinks among the open florets surrounding him in a ring, no doubt repaying his host by acting as parcel post for the pollen.

On the top of the Saddle, brown afrikanders are in lovely profusion. On this more or less neutral ground, as regards slope, they are all orientated facing east, thus providing for a through lighting from the afternoon sun.

A number of anemones are in bloom here, but only on the burnt patches.





A bright flower at this time of the year is *Antholyza aethiopica*. The flowers arrange themselves on the stem featherwise, and show up brightly in the shadiest spots, with their colouring of scarlet over yellow. They are found in the kloofs, and along with them another shade-loving plant, the handsome *Knowltonia*. The beauty of this queen of hidden kingdoms in deep and bosky kloofs is one of elegant and graceful form, as her flowers are green. She belongs to the *Ranunculus* or buttercup family, and is a cousin of our anemone. The inflorescence, which is a large scape, rises on a separate stem from the ground.

On the western slopes of the Mountain brown afrikanders and the pretty blue papies (*Gladiolus gracilis*) are now blossoming.

Winter here brings wind and rain, but our only snow is the fairy flowers (oxalis) which spread over the veld, and the pretty white sprays of *erocephalus*, the bush which seems to love to brighten up the edges of roads and pathways. The small but numerous flowers are of the composite order, and produce later on woolly fruit; hence the name "woolly head."



A flower having much in common with the brown afrikanders (*G. maculatus* and *G. grandis*) is *G. tristis*. It is seen more in the Eastern Province, where it is a favourite, than in the Peninsula, though there are certain places where it may be seen here, one being the Devil's Peak; and near the Silvermine River a variety appears in the summer which one botanist calls a Christmas form of *G. grandis*.

G. tristis varies in colour from white to sulphur yellow (true evening flower colours) and salmon, and it waves in the breeze on a tall wiry stem. Their

characteristic scent, which reminds one of the brown afrikanders, is stronger in the evening, and the popular name accordingly is "avondbloem," or "aandbloem."

There are no "honey-guides" painted on the petals, but here again we have the through lighting, as when the flower is held to the eye light shines through at the back of the tube. In the evening the glow of the flower would be accentuated there from the inside and act as a guide to the moth. It then becomes a fairy palace filled with a languorous scent.

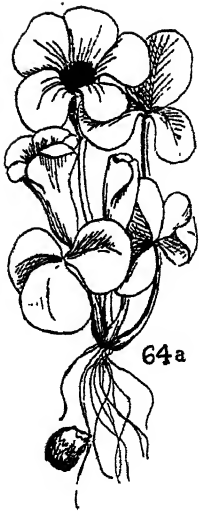
This is not the place to enter at large on the wide subject of the movements of plants; elaborate works on the subject have been written, and can be consulted by those who wish to pursue the subject more seriously. It is useful, however, to remember on our walks that plants are not the immobile things some people imagine. Apart from what may be called the more "sensational" movements, such as those of the insectivorous plants and that of the very sensitive mimosa whose leaves fall for protection between its thorns when disturbed, and, of course, the daily movements of flowers which open and close, or are heliotropic, we may observe, for instance, that practically all plants are extremely mobile while existing in the form of seed—and in the case of annuals for a part of the year this is the only form in which they do exist. Some seeds have parachutes (*Compositae*), some propeller-like flanges; some are very numerous and tiny so that they fly in the wind like dust (orchids), some are prepared for floating on a current of water for a given time (water-lily); some make use of animals or birds as carriers either internally, as when the



hard seeds of fruits are passed unharmed through the digestive canal, or externally by devices for anchoring on or clinging to some part of the periphery of an animal, and so on, exhaustive details being of course beyond our scope.

The waving grasses and the tassel-like catkins hung out by trees before their leaves appear to obstruct the free passage of air through their branches remind us that in many species the wind is utilised as pollen-carrier.

Besides these obvious uses of currents of air, it will be impressed upon you if you go out with one of those talented people who photograph flowers *in situ* how very seldom the parts of a plant are really still. Many flowering stems, as we have mentioned in the case of afrikanders and "avond-bloems," are tall and very fine-drawn with an exquisite elasticity so that the flowers continually waver from side to side (owing to the curvature of the stem, not backwards and forwards as in the case of bells); and it is not a far-fetched idea that this is a provision for diffusing the scent. Again, movement catches the eye, and this may be observed to obtain not only with ourselves but with other animals and birds, with hunting-spiders, and very likely with insects, as indeed would appear from a certain fly which sits and flips its wings in the sunshine when seeking a mate. Thus movement would aid colour in flowers to fulfil its function in attracting the attention of visitors. Movement caused by wind often increases the beauty of a mass effect of flowers. The harmonious planes arrange and rearrange themselves as the air-currents pass over them, every movement being graceful unless the wind is so violent as to be destructive.





PROTEA VELLIFERA

*

JUNE

PRINCIPAL FLOWERS IN BLOOM.

- * Red Afrikanders. (50)
- * Brown Afrikanders. (47)
- * "Papies" (*Gladiolus villosus* and (49)
Gladiolus gracilis). (40)
- * Flames. (7)
- * Babiantjes. (15)
- Proteas. (68)
- * Leucadendron. (56a and b)
- * Mimetes. (60)
- * Wax Runner. (59)
- Arum. (12)

*

WILD FLOWERS OF THE CAPE

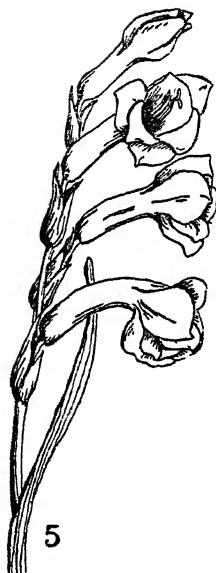
JUNE

In the winter months those adventuring on mountain walks or climbs will often find the weather uncertain, and discussions which it is difficult to bring to finality accordingly ensue at starting time.

If the decision is to rely on discretion rather than valour, it is perhaps regretted later more often than not. Everybody must of course decide for himself or herself and allow for the personal equation, and I therefore make no pretence of advising; but I can say with truth that while I have known many thorough wettings on these occasions I have never known any harm come from them.

Mountain clothes don't matter, and it is best not to worry, but, once thoroughly and comfortably wet through, to enjoy the new beauties of the scenery which appear under these conditions.

The two oceans which may be seen from our mountains appear and disappear in glimpses, and it is seldom there is not an occasional gleam of sunshine to make a blue patch against the shore and reveal the rollers with white waves chasing each other on the sands.



Seen against an opposite slope, the driving rain will reveal that it has a pattern as it flows past in rejoicing waves, and is not of a single simple texture.

This diaphanous veil softens and thus heightens the charms of the slopes, and the eye appears to see more detail than when the view is bathed in hot sunlight.

Delightful framed views will appear—now distant, now near at hand—as breaks in the cloud let through shafts of sunlight. Sometimes there are quite a number of rainbows.

As to the flowers, those which open to the sky will shew their various devices for protecting the precious pollen, such as screwing up the petals into a close tube, or bending them over to form a roof. Roofed bells like the afrikanders remain open and look delightfully fresh and happy.

Towards evening the wet day often clears, and the descent is made towards a sunlit landscape and a sea which is turning from grey to blue, while the cloud and mist remaining at the upper levels break up and the remnants escape through the tops of the ravines.

Brown afrikanders are still blooming, while red afrikanders increase in numbers this month. Flames (*Antholyza merianella*) are now seen, and the anemone begins to bloom freely. The blue baviantjes sometimes seem to break out in a night, and on revisiting a slope after a few days interval one may find them all over the place. Lobelias add a deeper shade of blue to the picture, while *Brunia nodiflora*, a plant of the order *Thymelaeaceae*, and leucadendrons add their creamy and old-ivory tones to the picture.



Brunia (order *Bruniaceae*) will be recognised by the close knobs formed by its heads of flowers, while the *Thymelaeaceae* are usually small plants with heath-like leaves and numerous little star-like flowers with tubes. The leucadendrons spoken of are low-growing bushes belonging to the protea family, and the genus is distinguished by having the sexes on different plants. Female cones will be found on one bush and male cones bearing pollen on another. The floral leaves surrounding the cones assume bright yellowish and old-ivory tints, and extensive slopes are sometimes thus decorated, as may be seen on the mountain above St. James this month.

To the casual glance all red afrikanders look alike, but there are really two species—*Gladiolus watsonius* and *Antholyza revoluta*. *G. watsonius* is a slighter and more delicate form, while *revoluta* is a taller and stouter plant. In both the bright red perianth-segments, which are pointed, open widely above the tube. The flower is about an inch and a half across, and the stem of *revoluta* grows up to thirty inches or more in height, bearing four or more flowers, while *G. watsonius*, as a rule, has only one and is about twenty inches high. *G. watsonius* is usually the first in bloom, *A. revoluta* following on and overlapping. They are found in the same situations, and would appear to live very much the same lives.

Hybrids are thought to occur between *G. watsonius* and the brown afrikander (*G. maculatus*), and I have found a flower above Muizenberg which had every appearance of being such.

Sometimes a very yellow specimen of *G. maculatus* will be found. It may be noted that the close reddish-brown stippling which causes the characteristic



colour is usually on a more or less yellowish ground. There are fairly distinct "honey-guides," and the scent is strong in the daytime.

Red afrikanders of both species are now in great force, and a good place for them is near the top of the southern side of Farmer Peck's Valley, Muizenberg, and at the foot of the krantzies. There they are all orientated looking down-slope and to face the morning sun. In profusion they make the brightest of pictures.

None of our flowers is more visibly responding to protection than the scarlet crassula (*Roechea coccinea*). It seeds freely, the seeds that find suitable situations soon germinate, and the young plants grow quickly for a fleshy perennial. They grow in all sorts of positions on rocks, as is well known, but their ideal situation is a rock shelter facing east—such a home as the Bushman loved.

I have found a rock on the Muizenberg plateau inhabited by what may be called a tribe of twenty to thirty plants. The rock was hollowed to form a pent-house roof in a curve from north-east to south-east, shallow enough for plenty of light and air, but deep enough to provide a sandy floor free from other vegetation. There was the tribe, occupying the space, but in no way crowded; some youngsters, others with heads of fruit.

In a classic instance, Darwin connected old maids, cats, field mice and flowers, the chain being that the old maids kept the cats, the cats killed the field mice, which would have killed the bumble-bee which fertilized the clover. Similar links, no doubt, connect the snakes, rats, and flowers of our veld, and the actual sight of a snake disposing of a rat helps one to realize the usefulness of these reptiles.



Attracted by a loud squeaking in the bush, I made quietly for the spot, and located the noise in a dense clump. On cautiously parting the vegetation and peering down, the first things I saw were the bright eyes of a half-sized rat, as its head jerked violently up and down. Then a length of the whitish belly of a very slim snake caught the eye. Parting the bush a little further, I had a complete view of what was happening. The snake, which was a small mole snake about fifteen inches long, had thrown six coils round the rat and was constricting it. The snake would appear to have turned on its back and thrown coils round the rat from below, as the free tail end of the reptile was on the ground belly upwards. The head was at present invisible, but it was towards the rat's tail.

One supposes that the reptile would be lying with its protective colouring on the bare ground beneath the bush in one of the little pathways which small animals make, and the rodent innocently walked over it.

There was no movement on the part of the snake visible at this stage. On the struggles of the rat ceasing, however, which very soon happened, the snake's head appeared from somewhere about the hindquarters; it was no bigger than a filbert-shaped nail on a little finger, and the neck was of the diameter of a pencil.

This little head and neck, dark mole colour above, came deliberately round, and, finding the rat's nose, arranged itself in careful alignment with the long axis of the victim. Then commenced the apparently impossible task of swallowing. The lower jaw disappeared under the rat's nose, and the upper, parting from it, began to climb the slope of the rat's



relatively enormous head, like a sliding patch of enamel, embossed and lozenge-shaped.

Now, what would happen? Could that bulging head possibly pass through that pencil-slender neck? Surely the snake, young and inexperienced, had made a miscalculation? The scales on the neck began to part and become separated from each other by lines of whitish skin; the forepart of the head was passing through. Was the process continuing or had matters come to a standstill? No, the black enamel patch was still creeping on, but one waited in vain for a bulge equal in size to the head of the rat. The bones were being crushed by the muscles of the snake's neck.

The portion of the snake where the rat was, however, changed from the thickness of a pencil to that of a brandy-bottle neck, and, the scales being parted by lines of whitish skin, the colouring was of course altered, the effect being one of net covered with diamond-shaped black sequins.

When the forepart of the rat arrived beyond the neck at the snake's stomach, progress, though still deliberate in the extreme, was accelerated, as the stomach took a hand in the swallowing, and the body-walls, powerfully constricting, pulled and pushed the rat downwards. Leaning a little closer, one could hear a muffled continuous crackling as the bones of the prey were demolished by the pressure.

The process continued until the head of the snake had passed over the tip of the tail of the rat, the journey being continued in a straight line all the time.

The central portion of the snake was then a sausage five or six inches long, covered with the net and sequins of the stretched skin.



It seemed another miracle when one noticed that the dainty little head and neck were perfectly normal again. The eyes in the little black sealingwaxy head expressed contentment. A subtle gleam of triumph I thought I saw must perhaps be referred to my own imagination.

In addition to the places already mentioned, both brown and red afrikanders are to be seen about the Contour Road on the front of the Mountain, near the pipe track from Kloof Nek to Slangolie, and on the Lion's Head Reserve. On the western slopes many of the the pretty pink and blue papies (*Gladiolus villosus* and *G. gracilis*) will be seen. The wax runner (*Microlooma tenuifolium*) is also found in flower there this month.

Handsome bushes of the genus *Mimetes* (protea family) begin to flower this month and may be recognized by the heads of a few flowers surrounded by brightly coloured floral leaves in a more or less upright position. The bark is very thick, and the bush (which often deserves to be called a sturdy tree) has wonderful fire-resisting properties. There are some good specimens on the Silvermine Plateau, and a favourite tree, which has survived many destructive fires on Table Mountain, a little south of Slangolie.

We have now come full circle in our notes of a floral year in the Cape Peninsula. Nature has nowhere made a more vivid appeal to man to rejoice with her, and do his devoir to the fair lady by staying his hand from vandalism.



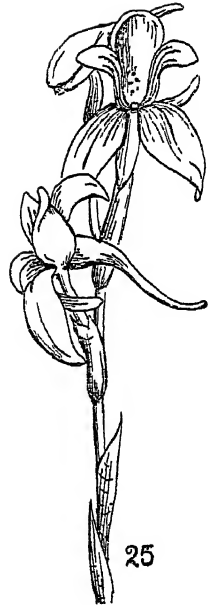
APPENDIX

PROTECTION OF WILD FLOWERS.

A list is appended for the guidance of flower-lovers of those flowers the picking of which is prohibited under the regulations of the provincial authorities, and it seems desirable to add a few words as regards the reasons for this provision.

A number of years ago alarm was caused by the diminution in numbers of some of the most beautiful species, and an act was passed by the Cape Parliament in 1905 to enable regulations to be issued forbidding the picking of certain species on Crown lands. This was amended in 1908. At Union the matter was handed over to the Provincial Council, and, the old acts having proved defective, this body passed an Ordinance in 1913. In practice defects again developed, and an amending Ordinance was passed in 1925.

Under the Ordinance regulations are issued prohibiting the picking of certain species except by the owner of the land on which they grow (or with his written permission), and other regulations forbidding the sale of certain species by any person whatsoever



unless they are cultivated. With this second list we are not troubling our readers, but those who are interested will find the latest list in the Official Gazette.

Very many people do not realize what a flower is, and even magistrates have remarked on the bench that "it does flowers good to be picked," and have spoken of unpicked flowers as "perishing on the veld."

But the wild flower is the organ of reproduction of the plant by seed, and the flowering time of a wild plant is its breeding season, just as certain seasons are the breeding seasons of animals, and it is just as necessary if we do not wish them to suffer diminution of numbers and eventual extermination that the breeding season of wild plants should be respected as that of wild animals.

A faded flower is not "perishing on the veld"; it is merely stripping off its bridal dress and getting to work to rear a family. The showy petals, having done their work in attracting the butterfly or other visitors which carry the pollen from one flower to the stigma of another, are naturally discarded. They are not vital parts of the flower, and those flowers which rely on currents of air to carry the pollen do without them altogether. So far from "perishing," great activity now goes on: the seeds are matured, and the nursery or fruit increases in size—sometimes immensely, as witness a pumpkin, which is a fair achievement for something which has "perished"! The fruit in its turn may also be made attractive in colour and edibility in order to attract birds or animals, which having eaten it distribute the specially protected seeds by ejection from the crop or by passing them through the digestive canal.



It is often said, however, "Oh, if we are careful and do not destroy the bulb or tuber, the plant will continue to renew itself."

This is true up to a certain point, but vegetative reproduction, as it is called, does not produce a new individual, while the object of seed is to renew vitality by producing a new individual from the union of two others, and to find fresh ground. The importance of both these points is shown by the endless devices to ensure cross-fertilization of the flowers, and wide distribution of the seeds. Bulbous plants have disappeared from many places through persistent picking of the flowers.

The other common argument is that "it does flowers good to be picked." This is derived from the fact that an effort will be made in many cases by the plant to produce another flower and nursery in place of the lost one, and therefore it pays the amateur gardener to cut his sweet-peas and not allow them to go to seed. He buys his new seed from the nurseryman, who does not exhaust his seed plants in this way. A moment's thought, therefore, will show that to apply this idea to wild flowers which have to look after their own propagation against all their natural enemies and difficulties is absurd. They must produce seed, and they usually have to produce it in great quantities in order that a little may survive. Their seeds are not sown for them in a carefully prepared bed weeded of competitors.

The fatal gift of beauty in our wild flowers attracts man, and the first impulse of many people is to make them a personal possession, and regardless of the consequences (of which they do not think) to break them off and thus destroy them as far as their natural purpose is concerned.

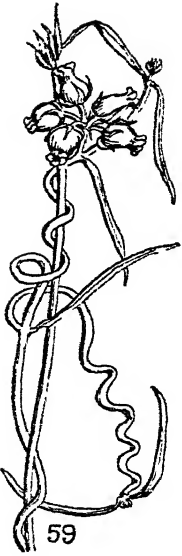


In the opinion of very many people their greater beauty is also thus destroyed, for there is surely no comparison between the beauty of a flower in its natural surroundings and one arranged in an artificial receptacle, however skilfully. The glorious pictures presented by flowers in their natural profusion in suitable situations are also destroyed by picking, even if some be left.

The wild flora of the Cape is a natural heritage and belongs to everybody. It would not be right that the flowers should be the prey of the scrambler even if that were not certain to involve their eventual destruction.

It is the present dismal fate of man that he has given survival value to plainness and uninterestingness, and made the qualities of beauty and interest in natural objects a danger to their bearers.

He is thus at present haplessly destroying what he admires, like a child that has caught a butterfly. Every increase of power by mechanical attainment increases his destructiveness, and it must be the concern of all of us to help in the turning of this dangerous corner and the finding of a way to the essential restraint in the use of our giant's strength.



PROHIBITION OF PLUCKING, GATHERING, UPROOTING,
BREAKING OR DAMAGING CERTAIN SPECIFIED WILD
FLOWERS—APPLICABLE TO THE WHOLE OF THE CAPE
PROVINCE.

No person (except the owner of the ground or anyone acting with his written permission) shall, until further notice, pluck, gather, uproot, break or damage any of the undermentioned wild flowers, ferns or shrubs,
viz. :—

RANUNCULACEAE (Buttercup family).

Anemone capensis, Linn. Anemone.

SAPINDACEAE.

Aitonia capensis, Thunb. Chinese lanterns—Klapperbosch.

LEGUMINOSAE (Pea family).

Liparia sphaerica, Linn. Orange nodding-head.

CRASSULACEAE (Crassula family).

Rochea coccinea, D.C. Red crassula.

Rochea versicolor, D.C.

BRUNIACEAE (Brunia family).

Staavia Dodi, Bolus. Large cream and black staavia.

Audouinia capitata, Brogn. Crimson false heath.

ERICACEAE (Heath family).

Erica glauca, Thunb. Cup and saucer heath.

Erica ventricosa, Andr. Ventricosa.

Erica vestita, Thunb. Wide-mouthed heath.

Erica sacciflora, Salisb. Dark-mouthed heath.

Erica catervaeiflora, Salisb. Rose-pink tree heath.

Erica Thunbergii, Montin. Yellow petticoat heath.

ASCLEPIADACEAE.

Microlooma tenuifolium, K. Schum. Wax twiner.

SCROPHULARIACEAE (Snapdragon and foxglove family).

Harveya capensis, Hook. White harveya.

Harveya stenosphon, Hiern. Scarlet harveya—Rooi inktbloem.

BIGNONIACEAE.

Rhigozum obovatum, Burch. Wild pomegranate—Driedoorn.

PROTEACEAE (Protea family).

<i>Protea cynaroides</i> , Linn.	Giant protea.
<i>Protea rosacea</i> , L.	Mountain rose.
<i>Serruria florida</i> , Knight.	Blushing bride.
<i>Protea grandiceps</i> , Tratt.	Oval-leaved protea.
<i>Mimetus hirta</i> , Knight.	Red and yellow bottle-brush.
<i>Orothammus Zeyheri</i> , Meisn.	Marsh rose.
<i>Protea barbiger</i> , Meisn.	Woolly-bearded protea.
<i>Protea pityphylla</i> , Phillips.	Red and green protea.
<i>Protea Marlothii</i> , Phillips.	Marloth's protea.

PENAEACEAE (Penaea family).

<i>Brachysiphon imbricatus</i> , A. Juss.	Imbricated penaea.
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ORCHIDACEAE (Orchid family).

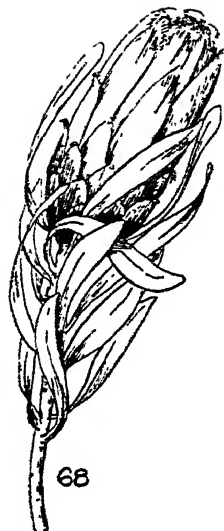
<i>Disa longicornu</i> , Linn. fil.	Drip disa.
<i>Disa uniflora</i> , Berg.	Red disa.
<i>Disa harveiana</i> , Lindl.	Mauve or lilac disa.
<i>Disa graminifolia</i> , Ker.	Blue disa.
<i>Disa ferruginea</i> , Sw.	Cluster disa—Rode tros disa.
<i>Disa spathulata</i> , Sw.	Begging hand—Oupa pyp-in-die-mond.
<i>Herschelia venusta</i> , Kranzl.	Lesser blue disa.
<i>Satyrium carneum</i> .	Rooi trewa.

MUSACEAE.

Strelitzia—all species.

IRIDACEAE (Iris and tulip family).

<i>Witsenia maura</i> , Thunb.	Bachakiri's tail—Waaiaertje.
<i>Ixia columellaris</i> , Ker.	Blue kalossie or ixia.
<i>Antholyza revoluta</i> , Burm.	Large red afrikander or Eastern Province flames.
<i>Antholyza Gawleri</i> , L. Bolus.	Eastern flames.
<i>Gladiolus grandis</i> , Thunb.	Large brown afrikander.
<i>Gladiolus maculatus</i> , Sweet.	Brown afrikander.
<i>Gladiolus recurvus</i> , Linn.	Mauve or blue afrikander.
<i>Gladiolus debilis</i> , Ker.	Painted lady—Gestreepte afrikaner.
<i>Gladiolus blandus</i> , Ker.	Broad-leaved painted lady.
<i>Gladiolus angustus</i> , Linn.	Long-tubed painted lady.
<i>Gladiolus cuspidatus</i> , Jacq.	Wavy-pointed painted lady.
<i>Gladiolus tabularis</i> , Eckl.	Autumn painted lady.
<i>Gladiolus hastatus</i> , Linn.	Short-tubed painted lady.
<i>Gladiolus Pappei</i> , Baker.	Christmas painted lady.



<i>Gladiolus cardinalis</i> , Curt.	Waterfall gladiolus—Zwaardlelie.
<i>Gladiolus tristis</i> , Linn.	Yellow marsh afrikander—Avondbloem.
<i>Gladiolus hirsutus</i> , Jacq.	Large pink afrikander.
<i>Gladiolus spathaceus</i> , Pappe.	Caledon bluebell.
<i>Gladiolus inflatus</i> , Thunb.	Pinkbell.
<i>Gladiolus Bolusii</i> , Baker, var.	
<i>Burchellii</i> , Bolus, fil.	Riversdale bluebell.
<i>Gladiolus Bolusii</i> , Baker.	Tulbagh bluebell.

AMARYLLIDACEAE (Amaryllis family).

<i>Brunsvigia gigantea</i> , Heist.	King candelabra lily.
<i>Vallota purpurea</i> , Herb.	George lily—Berglelie.
<i>Ammocharis falcata</i> .	Malagas lily.

PROHIBITION OF UPROOTING, BREAKING OR DAMAGING
CERTAIN WILD FLOWERS—APPLICABLE TO THE WHOLE
OF THE CAPE PROVINCE.

No person (except the owner of the ground or anyone acting with his written permission) shall, until further notice, uproot, break or damage any of the undermentioned wild flowers, ferns or shrubs, *viz.* :—

NYMPHAEACEAE.

<i>Nymphaea stellata</i> , Willd.	Blue water lily.
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LEGUMINOSAE (Pea family).

<i>Podalyria calyptrata</i> , Willd.	Pink sweet pea bush.
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ERICACEAE (Heath family).

<i>Erica lowryensis</i> , Bolus.	Sir Lowry's Pass heath.
<i>Erica regia</i> , Bartl.	Elim heath.
<i>Erica halicacaba</i> , Lind.	Green heath.
<i>Erica papyracea</i> , Guth. and Bol.	White papery heath.
<i>Erica sitiens</i> , Kl.	Thirsty heath.
<i>Erica propendens</i> , And.	Pink drooping-bell heath.
<i>Erica fastigiata</i> , Linn.	White and red four-flowered heath.
<i>Erica campanulata</i> , Andr.	Yellow heath.
<i>Erica viscaria</i> , Linn., and var.	
<i>decora</i> , Bolus.	Sticky rose-pink heath.
<i>Erica conspicua</i> , Soland.	Vlei heath.
<i>Erica perspicua</i> , Wendl.	Prince of Wales heath.

<i>Erica exurgens</i> , Andr.	Red and yellow heath.
<i>Erica Pillansii</i> , Bolus.	Pillans heath.
and var. <i>minor</i> .	Lesser Pillans heath.
<i>Erica cruenta</i> , Soland.	Crimson heath.
<i>Erica denticulata</i> , Linn.	Sweet-scented heath.
<i>Erica MacOxani</i> , Cuf.	MacOwan's heath.

IRIDACEAE (Iris and tulip family).

<i>Ixia viridiflora</i> , Lam.	Green ixia.
<i>Antholyza watsonia</i> , L. Bolus.	Small red afrikander.
<i>Antholyza merionella</i> , Linn.	Flames.
<i>Freezia refracta</i> , Klatt.	Freezia.
<i>Tritonia crocata</i> , Ker, and <i>hyalina</i> , Bkr.	Mossel Bay kalkoentjes.
<i>Gladiolus tenellus</i> , Jacq.	Small brown afrikander.
<i>Gladiolus alatus</i> , Linn.	Red and green kalkoentje.
<i>Gladiolus gracilis</i> , Jacq.	Tulbagh bluebell.
<i>Babiana rubrocyanea</i> , Ker.	Blue babiana—red centre.
<i>Babiana macrantha</i> , MacOwan.	Large cream babiana—dark centre.

AMARYLLIDACEAE (Amaryllis family).

<i>Amaryllis belladonna</i> , Linn.	Belladonna or March lily.
<i>Nerine</i> —all species.	Nerine.
<i>Buphane ciliaris</i> , Herb.	Ciliated-leaved candelabra— Zieroogbloem.

LILIACEAE (Lily family).

<i>Kniphofia aloides</i> , Moench.	Red-hot poker—Soldaat.
<i>Agapanthus umbellatus</i> , L'Her.	Blue agapanthus.

FILICES (Ferns).

<i>Adiantum thalictroides</i> .	Western maidenhair fern.
<i>Hemitelia capensis</i> , R. Br.	Tree fern.

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